



The Resonator

Official Newsletter of The Fair Lawn (NJ) Amateur Radio Club

Volume 6, Number 3

www.FairLawnARC.org

March 2021

From The President

Dear FLARC Family,

Many good things continue to happen at FLARC, and we hope to continue to provide you with activities that will keep us moving. We listened to you, and we will deliver.

Pop Up Tuesdays are back. We know these will take place in a virtual platform, but it will provide us a way to gather and spend some time together.

Also, with our Special Interest Groups (SIGs) having meetings, Kawfee Tawks and more, the opportunity of staying active will not diminish.

Please, continue to provide us your input on what you would like to see happening at FLARC. Your opinion is IMPORTANT.

We had a great POTA (Parks on the Air) activation at Tallman Mountain Park. A wonderful group of FLARC members showed up to activate the park. To all that came out to support as activators and

Continued on page 46.

New Member Profile

Name: Noel Pagan Call: W2MSA

What do you do?

I'm currently employed for over 20 years at Handi-Lift Inc. as a Certified Accessibility Technician, providing technical services for ADA elevators and lifts. My job is a very challenging and self rewarding job - besides repairing and maintaining the equipment which consist of mostly electromechanical type work, I find myself interacting with a wide variety of clientele, from the average person, to very elderly people that share great stories from the past, to people of celebrity status.

Because of the type of work I do, I've been able to go to places that I would never imagine, both good and bad, keeping things really interesting every day of the week. When interacting with handicap people I like to give them my full attention and listening to some of their stories makes me really appreciate the small things in life we take for granted.

The technical side of the job I really enjoy, trouble-shooting electrical problems. The equipment I work on consists of electronic circuit boards, PLC units, electric motors, relays, switches, hydraulic pump drives and high voltage motor drive systems.

I enjoy what I do for a living and I live a happy life because of that. Like I tell my kids, you must find a good balance between making good money and enjoying what you do.

Continued on page 15.

INSIDE THIS ISSUE

1	President's Message
1	Member Profile
4	ARES / RACES Report
6	Master Event Calendar
2	VE License Testing
16	The Way We Were – Fred Belghaus W2AAB
25	Around the Shack – Hal Kennedy N4GG
50	Business Meeting Notes
33	SIG Report - D M R
45	SIG Report - Portable Ops
33	SIG Report - Radio Monitoring

FLARC To Hold VE Testing On March 13th at NEW LOCATION

On March 13, 2021 Fair Lawn Amateur Radio Club will continue amateur radio test sessions on a trial basis. These sessions will be held indoors.

The location is at:

The Masonic Lodge
99 S Maple Avenue
Ridgewood, NJ

NOTE THAT THIS IS A NEW LOCATION!

Covid-19 related incidents will cancel testing.

Prior to Testing:

Send an email to wo2w@arrrl.net requesting to book your spot. **Pre-registration is REQUIRED.**

Please Bring With You:

- You **MUST** bring and **WEAR** personal PPE items including a face mask
- 2 pens and 2 pencils. None will be provided to you due to possible virus transmission
- Your FRN number, and (if licensed) a copy of your ham license or a valid CSCE (Certificate of Successful Completion Exam)
- A completed Form 605 (which will be sent to you ahead of your test session, along with your assigned test time.)
- Additionally, the **\$15.00 exam fee**. This is payable in cash (**exact amount is a must**)
- 3 copies of the CSCE form which will be sent to you ahead of your test session

Additional scheduled testing dates are:
March 13, 2021 and April 10, 2021.

FLARC is following government Covid-19 guidance closely and all events will adhere accordingly to the latest advice.

FLARC Announces Outdoor Hamfest For Saturday, April 24, 2021

The club has announced the creation of its first hamfest to be held at the Fair Lawn Recycling Center on Saddle River Road on Saturday, April 24, 2021 with a rain date of .

This replaces our last year's Thanksgiving Friday auction, which was cancelled by the Covid-19 virus.

Details will follow but **please save the date** and **please volunteer** to make this a successful club event.

For questions please contact Gene WO2W at wo2w@arrrl.net Or Visit our website at www.FairLawnARC.org.

FLARC is following government Covid-19 guidance closely and all events will adhere accordingly to the latest advice.



Fellow FLARC Members,

As we all know, the coronavirus continues to be top of the news and that the club is closed until further notice. Out of an overabundance of caution and our care for your safety, all FLARC events are postponed until further notice due to COVID-19.

Check in on our nightly health and welfare net on the W2NPT repeater at 7:00 PM and let us know how you're doing. You may be isolated at this time but you are not alone. Stay safe!

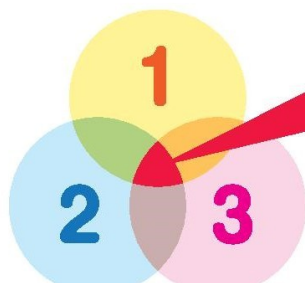
Important notice for preventing COVID-19 outbreaks.

Avoid the "Three Cs"!

- 1. Closed spaces** with poor ventilation.
- 2. Crowded places** with many people nearby.
- 3. Close-contact settings** such as close-range conversations.



One of the key measures against COVID-19 is to prevent occurrence of clusters.
Keep these "Three Cs" from overlapping in daily life.



The risk of occurrence of clusters is particularly high when the "Three Cs" overlap!

In addition to the "Three Cs," items used by multiple people should be cleaned with disinfectant.

Source: www.mhlw.go.jp

Nomar NP4H -- October 2020

The Club Fair Lawn ARC is the fastest growing ham club around, with five operating positions in a permanent clubhouse. Visitors and guests are always welcome. The club is open every Friday night from NLT 6:30 PM. Business meetings are the first Friday of the month at 7:30PM.

2021 Officers, Committees and Assignments

President	Nomar Vizcarrando	NP4H
Vice President	John L. Howard	W2JLH
Treasurer	Bruce Kalogera	NJ2BK
Secretary	Tom McCabe	N2AXX
Trustee	Ed Efchak	WX2R
Trustee	Don Cassarini	K2PD
Trustee	Fred Wawra	W2ABE
Field Day	Steve Wraga	WA2BYX
Member Services	Judith Shaw	KC2LTM
Publicity	Ed Efchak	WX2R
Publicity	Gene Ottenheimer	WO2W
Publicity	Judith Shaw	KC2LTM
Publicity	Susan Frank	W6SKT
Program	Lowell Vant Slot	W2DLT
Publicity	Karl Frank	W2KBF
Publicity	Nomar Vizcarrando (<i>ex officio</i>)	NP4H
Social Media	Dave Marotti	NK2Q
Video/YouTube	Thom Guida	W2NZ
VE Liaison	Gene Ottenheimer	WO2W
VE Liaison	Pete Senesi	KD2BMX
Contests	Lowell Vant Slot	W2DLT
Education	Gordon Beattie	W2TTT
Education	Randy Smith	WU2S
Education	John L. Howard	K2JLH
Education	Fred Wawra	W2ABE
History	Fred Belghaus	W2AAB
Health and Welfare	Judith Shaw	KC2LTM
Photographer	Don Cassarini	N2PRT
W2NPT Trustee	Paul Cornett	W2IP
Technical	Paul Cornett	W2IP
Technical	Randy Smith	WU2S
Technical	Fred Wawra	W2ABE
RACES/ARES Director	Dave Gotlib	KD2MOB
RACES/ARES Liaison	Steve Wraga	WA2BYX
Newsletter Editor	Ed Efchak	WX2R
FL Town Liaison	Gene Ottenheimer	WO2W
Net Scheduler	Brian Cirulnick	KD2KLN
Quartermaster	Brian Cirulnick	KD2KLN

Fair Lawn RACES/ARES Corner



Hello fellow ARES members and friends.

With Spring and the warmer weather ahead, FL-ARES is preparing for additional drills with the American Red Cross. The actual drill will be taking place on Saturday, May 8th, and there will be practice drills, in preparation for the actual drill. More information will be provided in the April 2021 FL-ARES Column.

We have very big news to report. A new ARES Net is taking place every Wednesday at 8:00 PM, which is the same time slot and uses the same frequencies as the FL-ARES Net.

The new ARES Net combines FL-ARES with Bergen County ARES and Passaic County ARES for one weekly Northeast NJ ARES Net.

It has come to our attention that combining the Nets would provide greater interest (check-ins), more emergency communications discussion and messaging during one timeframe versus three separate dates and times. Sure enough it has!!

I would like to thank Ali ALØY for being the Net Control Operator (NCO) for our very first Northeast NJ ARES Net and for sending a Radiogram to Brooklyn, NY on RF as well.

Also, for the first time Ed KD2TVZ was the NCO for the Net (and first time being a NCO for any net). Job well done!!

Our Nets are open to all amateur radio enthusiasts. Our ARES members, who are volunteers, are able to assist anyone with answers to questions they may have regarding emergency communications.

Continued on page 5.

Fair Lawn RACES/ARES Corner, cont.

Also, our Nets include members who are not only a part of Fair Lawn ARES; the nets consist of members from Bergen County ARES, Passaic County ARES, Gloucester County ARES and Wayne County (PA) ARES as well. We are all invited to connect to the local Winlink Radio Message Server (RMS) ALØY-3 via the NJ2PC Repeater on a frequency of 146.610 MHz using Winlink, VARA FM. The Winlink drills are typically all day on Sundays and I would encourage the FL-ARES team and other ARES members to send messages using WinLink.

Winlink is a messaging program which encompasses various messaging applications such as Telnet, Packet, VARA HF and VARA FM. ALØY-3 is one of two Radio Message Servers within 100 miles and has the capability of using VARA FM; and ALØY-3 is only 5 miles away from Fair Lawn.

Winlink opens up the world of emergency communications. There are many hams who aren't very familiar with Winlink; however, with practice, discussions and watching videos, learning comes a long way.

Please note the time of the new Northeast NJ ARES Nets (KB2FLA Nets). They are taking place on Wednesdays at 2000 hours on the FLARC and NJ2BS Repeaters. Maybe one day the NJ2PC Repeater will be connected as well.

Please join us every Wednesday for any updates,

Fair Lawn RACES/ARES Corner, cont.

messages or activities which may take place. We are on the following Repeaters and Echolink:

The Fair Lawn ARC Repeater info is: RX 145.47 MHz / TX 144.87, PL Tone 167.9 Hz. Echolink W2NPT-R.

The NJ2BS Repeater info is: RX 146.835 MHz / TX 146.235, PL Tone 151.4 Hz. Echolink KD2BKD-L.

FL-ARES would like to thank the FLARC for the use of its repeater as well as the Venture Crew 73 73 Club for the use of their repeater. We are fortunate to make Fair Lawn and the surrounding communities our home.

With our leadership and support from the FLARC we can grow and be of assistance in many community events.

We are always seeking new members to join FL-ARES. Please sign up for various nets and activities taking place at the following web address:

<https://arr1.volunteerhub.com /1p/nnj>

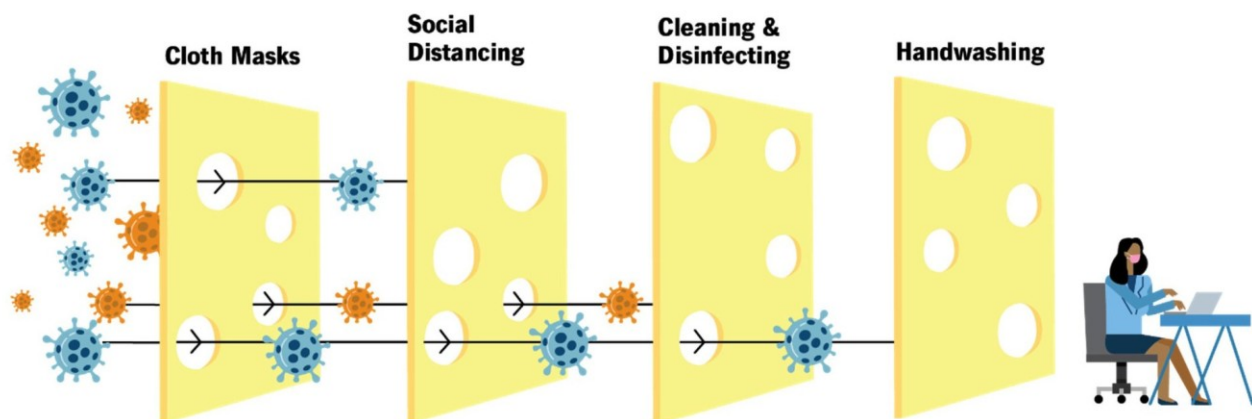
Info on FL-RACES is as follows:

Our next FL-RACES KB2FLR net will take place on Wednesday, March 10th at 2030 hours on the Fair Lawn ARC W2NPT Repeater as well as the NJ2BS Repeater (frequencies noted above).

Thank you to the Fair Lawn Amateur Radio Club for permitting FL-RACES for using the repeater.

FL-RACES is part of several RACES groups which

Continued on page 46.



MASTER EVENT CALENDAR

Out of an overabundance of caution and our care for your safety, (not to mention state law) all FLARC events are postponed or rescheduled until further notice due to COVID-19.

March 12, 2021	SPECIAL DATE: Dave Snyder KD2VGT "The Seton Hall Prep Ham Radio Balloon Project"
March 26, 2021	SPECIAL DATE: Otis Vicens NP4G • "How's DX? All About The IDEXA"
April 16, 2021	Wayne Smith WB2ONZ • "Amateur Radio and The Civil Air Patrol"
April 21, 2021	The FLARC Hamfest
May 21 2021	Roland C Luetzelschwab K9LA • "Propagation During Cycle 25"
June 13, 2021	Fair Lawn Street Fair (Radburn) [TENTATIVE]
June 26-27 2021	ARRL Field Day
October 17, 2021	Fair Lawn Street Fair (River Road) [TENTATIVE]



More Than A Club... A Community Of Friends!



Hidetsugu Yagi's 130th Birthday Google Doodle

SIG Group Participation as of February 12, 2021

Here is an update on the roster of Special Interest Groups...all groups have increased in size during the last month:

DMR	30
Monitoring	23
DX	14
FT8	16
POTA	23
Satellite	10

FLARC General 140

Sign up for a group... or ...
why not start one?

Contact webmaster@FairLawnARC.org
if you would like to start a new
Special Interest Group.

Follow FLARC ON THE WEB

Facebook: <http://facebook.FairLawnARC.org>

Twitter: @FairLawnARC

Blog: <http://blog.FairLawnARC.org>

Youtube: <http://youtube.FairLawnARC.org>

Website: <http://FairLawnARC.org>



Seton Hall Prep's Ham Radio Balloon Project

2021 FLARC March 12th "Kawfee Tawk" Series

Ham Radio as A STEM Project:

Pico Balloons Away! Success at Seton Hall Prep

As the 2021 FLARC 'Kawfee Tawk' Series Continues on March 12th

How can amateur radio influence the lives of students?

The STEM class of Seton Hall Prep in West Orange, NJ is currently using amateur radio to track high pressure (Pico) balloons that are now on a global adventure – to teach students not only the science but also how to collaborate on a bold project that would not only excite classroom students during Covid-19 but would also include those who were learning remotely. Students at home and students in the class needed to collaborate – and if they did not, the project would have been a disaster.

Here is the News12 story about the project: https://newjersey.news12.com/seton-hall-prep-stem-class-launches-high-pressure-balloons-to-circle-the-globe?fbclid=IwAR15Jk-kaztJ_Wdn62WK0XWPpFIPFc25-kRqetlyKY2y2TAs5QC9Dyo-4iI

Amateur radio and STEM are perfect complements – here is a working example not to be missed.

**The video presentation will be via Zoom
on Friday, March 12, 2021 beginning at 7:30 PM EST and is open to all.**

PLEASE NOTE THE SPECIAL "2ND FRIDAY" DATE ON YOUR CALENDAR



Dave Snyder KD2VGT

Our speaker will be Dave Snyder KD2VGT, who is a science teacher and Director of Educational Technology at the school. Dave is recently licensed in December 2020 and he brings a unique combination of pure science, teaching skills, project management techniques and amateur radio to provide a robust student experience. We hope that some of Dave's students will join us as well, to share their experience with the project and the use of amateur radio.

The program will last about an hour and will include an opportunity for questions and comments.



DX and DXpedition Secrets

2021 FLARC March 26th "Kawfee Tawk" Series

How's DX?

***Jose "Otis" Vicens NP4G Helps to Keep It Alive and We'll Find Out How
As The 2021 Fair Lawn Amateur Radio Club "Kawfee Tawk" Series Continues on March 26th***

How does great DX happen? If you said "out of thin air" you would only be half correct. It takes hard work, great planning, and dedication – along with luck – to bag the "rare ones." On March 26th, we will learn more about how it happens.

The International DX Association is an amateur radio organization dedicated to working DX and making DX possible. **The INDEXA** was incorporated as a non-profit organization and has been managed by volunteers without compensation since 1983. Over the years it has sponsored over 250 DX-peditions to rare and semi-rare countries. INDEXA exists to promote the future welfare of amateur radio and the DX community.

The program will also focus on how future DX-peditions are expected to return and the impact of Covid-19 on travel and operations.

The video presentation will be via Zoom on Friday, March 26, 2021 beginning at 7:30 PM EST and is open to all. NOTE THAT THIS IS A SPECIAL "FOURTH FRIDAY" KAWFEE TAWK MEETING. The program will last about an hour and will include an opportunity for questions and comments.

Join Zoom Meeting

<https://us02web.zoom.us/j/89753330013?pwd=RGlXSmhMZlZq3QzdWlRkpxN1g5Zz09>

Meeting ID: 897 5333 0013

Passcode: INDEXA

Our speaker will be Jose Vincens NP4G, a long-time volunteer to the association. He was born in Humacao, Puerto Rico in 1980. After high school, he went on to study at Purdue University majoring in Biology and Pre-Dentistry and was part of the W9YB Purdue Amateur Radio Club. He graduated Dentistry at University of Puerto Rico and Pediatric Dentistry from The Brookdale University Hospital and Medical Center in Brooklyn, specialized in Orthodontics at Stony Brook University School of Dental Medicine, Stony Brook, Long Island, NY. He is currently in private practice in Orthodontics and Professor at University of Puerto Rico School of Dental Medicine. From 2005-2008 he operated from Long Island, NY as NP3JG/W2. In 2008 he moved to Puerto Rico and changed callsign to NP4G. He is a **member of the Puerto Rico Amateur Radio League, and a Past President (2012).**

As a bonus, we are hoping that INDEXA President Bob Schenck N2OO will be able to join us.



AMATEUR RADIO TESTING BY THE FAIR LAWN AMATEUR RADIO CLUB

On March 13, 2021 the Fair Lawn Amateur Radio Club will continue amateur radio test sessions on a modified basis.

These sessions will be held at the **Ridgewood Masonic Lodge.**

The location is at 99 South Maple Avenue, Ridgewood, NJ

The session starts at 9:15 AM.

A document will be provided to you prior to the date to indicate the time assigned to you.

You must have it with you to take the test.

Prior to Testing:

Send an email to wo2w@arrl.net requesting to book your spot.

PRE-REGISTRATION IS REQUIRED - NO WALK-INS ACCEPTED.

Upon Arrival:

You must have a government issued ID such as a valid driver's license or passport, a filled out Form 605, and **3 filled out copies of the FCC CSCE form.**

Please Bring With You:

- You **MUST** bring and WEAR personal PPE items including a face mask.
- 2 pens and 2 pencils. None will be provided to you, due to possible virus transmission.
- Your FRN number, and (if licensed) a copy of your ham license or a valid CSCE (Certificate of Successful Completion Exam).
- Additionally, the **\$15.00 exam fee**. This is payable in cash (exact amount is a must).

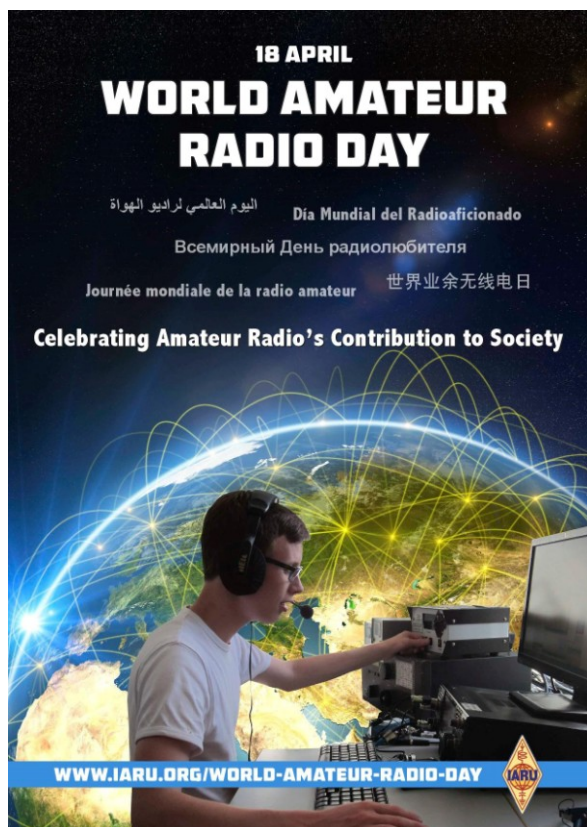
THE GREAT FLARC HAMFEST

Save The Date! April 24, 2021



Special Note: *As non-profit, the IRS now requires that we disclose annually the use of paid lobbyists to our members and indicate approximately what percentage of their dues goes toward that. 0% of your 2021 dues payment will be used by the club to directly pay a lobbyist firm to lobby on behalf of all our members regarding pending legislation that impacts our hobby.*

World Amateur Radio Day Is Coming!
Save The Date: Sunday, April 18th!



Please Note: Operating at W2NPT

Starting in January 2019 club trustees have sign-in sheets for all operating positions. There is a clipboard at Operating Position #1, #2 (digital) and #4 with a form on which to sign up for half-hour time slots. No longer first come-first served, in fairness to all who want to use our club equipment and the new antennas. Hopefully some day we will again be able to use our operation positions!

Get Direct With FLARC!

Here is a direct link to specific club info: just a click away!

<http://apparel.FairLawnARC.org>
<http://auction.FairLawnARC.org>
<http://blog.FairLawnARC.org>
<http://calendar.FairLawnARC.org>
<http://events.FairLawnARC.org>
<http://exams.FairLawnARC.org>
<http://facebook.FairLawnARC.org>
<http://news.FairLawnARC.org>
<http://swap.FairLawnARC.org>
<http://tech.FairLawnARC.org>
<http://youtube.FairLawnARC.org>

NEW !

<https://groups.io/g/FairLawnARC>



Online License Testing!

Are you looking to get your license or upgrade without leaving your home? All you need is a laptop computer with a video camera.

There are number of sites listed on hamstudy.org/sessions These folks will walk you through taking an exam online.

I have worked with both WB5QNG and AA7HW. If you have any questions, please contact me at mStevenk2sab@gmail.com

73,
Steven Boston K2SAB

March 2021 *Near and Far* Net Controls

Here is the roster for net controls for the upcoming month as reported by Brian KD2KLN:

Date	Net Control
March 1	KD2KLN
March 8	KD2MOB
March 15	Could be you!
March 22	W2KBF
March 29	N2AAM

But we need more volunteers to be net controls -- if everyone takes their turn it's less burden on the others. And it's easy.

Volunteer --- don't wait to be asked
(unless you really want to be flattered).

**Ham Radio Is Contagious
And It Won't Make You Sick!!**

UPDATE: FLARC Membership 2016-2021

Our new treasurer Bruce NJ2BK informed us that 2020 closed with 165 paid members, a very slight decrease for the first time since we started counting in our 60th anniversary year. But we've also learned that we've gained some new members in January to keep the total up!!

We are fortunate to have held our membership despite the pandemic and look forward to growing the club in 2021.

Please renew your dues for 2021 now!!

January 1	Paid Members
2021	165
2020	167
2019	145
2018	121
2017	108
2016	78

Club Apparel — Get Them While They're **RED!**

Club apparel is always in vogue. Red is always "in" and your club friends all have them... you want a shirt or jacket for the next FLARC event! Great for Field Day!

Don't forget.... they're easy to order.

Go to www.hamthreads.com

or visit <http://apparel.FairLawnARC.org>

Check out the item selection that is posted on the FLARC website (with pictures and prices). Order the shirts or other items you want with either the regular FLARC logo or the still-cool 60th anniversary logo. Note: RED is the primary and preferred club standard shirt color.

And why not WEAR your nice red shirt when you come to the club, especially for meetings and events.



Ed WX2R at his QTH in Fair Lawn

2021 FLARC Nets On The W2NPT Repeater:

Near and Far Net Mondays at 8PM

Health and Welfare Net Wednesdays at 7PM

W2NPT and NJ2BS Repeaters

Help Wanted

The Publicity Committee is looking for some new members to help continue to improve the marketing and promotion of the club, it's activities and amateur radio. This is an active group so a willingness to participate is a strong plus. Experience in digital marketing and/or public relations is a plus.

Call Ed WX2R at 802-282-6700 or email him at wx2r@arrl.net if you're interested.

Remember: Ham Radio Is A Contact Sport!

BEQUEATHS AND DONATIONS

Planned gifts usually imply the family donation of amateur equipment to the club when someone has become a Silent Key. But it can be more. Club members might consider making a gift through a will or trust; gifts that help provide lifetime income to the club. Consult with your lawyer, estate planner or tax advisor if you feel such a gift is worthy.

About The Club

The Resonator is published monthly and is the official (and only) newsletter of The Fair Lawn Amateur Radio Club. FLARC was established in 1956 and has met continuously since inception. **The club is sponsored by the Borough of Fair Lawn.** The club meets every Friday at 6PM at the club station in The Fair Lawn Community Center, 10-10 20th Street, Fair Lawn, NJ. Business meetings are the first Friday of the month at 7:30 PM, on Zoom for now.

Visitors ARE ALWAYS welcome at our meetings.

FLARC operates the W2NPT repeater (145.470-PL 167.9) located high atop the Community Center. The analog repeater is open to all amateurs for use without restrictions.

The club has over one hundred fifty paid members. Dues are currently \$25 per year;
\$20 for new members.

Content and opinions expressed by contributors do not necessarily reflect the policies of the Fair Lawn Amateur Radio Club, its Officers or members. Contributors grant express permission to FLARC to distribute articles in this or any issue of The Resonator. Authors also grant express permission for the use and/or repurposing of these articles, in part or in full, in other publications with credit to the original author and to The Resonator. All material is copyright ©2020. Do not copy or reproduce any of this material without the written permission of FLARC.

A New Net Is Born!

The Health and Welfare Umbrella Net
Wednesdays
7PM Local
W2NPT and NJ2BS Repeaters
Open To All

PUBLICITY COMMITTEE NEWS

The Publicity Committee is seeking new members to help grow the club with its varied activities. Enthusiasm desired... no experience necessary. Contact Ed WX2R or any other committee member.



**FAIR LAWN'S
COMMUNICATIONS CENTER!**
With New Antennas On The Roof!



Past FLARC Member Profiles

Here is a list of past member features and we welcome your recommendations for new profiles -- including your own.

Month	Name	Call Sign
January 2016	Pete	KB2BMX
February	Marco	KC2ZMA
March	Ron	KC2TBD
April	Kai	K2TRW
May	Larry	WA2ALY
June	Dave	N8MAR
July	Steve	WI2W
August	Thom	W2NZ
September	Brian	KD2KLN
October	Brad	KM2C
November	Al	WA2OWL
December	George	W3EH
January 2017	Fred	W2ABE
February	Dave	KD2MOB
March	Randy	WU2S
April	Lee	KD2DRS
May	Gene	WO2W
June	Carol	KD2NMV
July	Kevin	KC2KCC
August	Robert	KD2NOG
September	Robert	KD2BKD
October	John	KD2NRS
November	Fred	W2AAB
December	Margaret	W2GB
January 2018	Brian	KD2OAZ
February	Bennett	KO2OK
March	Van	W2DLT
April	Aly	ALØY
May	Bruce	NJ2BK
June	Dave	N2AAM
July	Karl and Susan	W2KBF and W2SKT
August	Steve	KA2YRA
September	Paul	K2PJC
October	Skip	KD2BRV
November	Jim	W2JC
December	Tom	N2AAX

By the way, Randy (WU2S) has compiled a binder of all back issues of *The Resonator* and it's located in the club office.
Thanks Randy!!!

2019-20 Member Profiles

The year is now complete and here is a list of the 2019 monthly profiles. See past profiles elsewhere in *The Resonator* to check back in the archives to see each featured member's background.

Month	Name	Call Sign
January 2019	Dave	KD2JIP
February	Jim	K2ZO
March	Zach	KC2RSS
April	Bob	N2SU
May	Stan	KC2K
June	Steve	WA2BYX
July	Roger	K2RRB
August	Judith	KC2LTM
September	Chris	W2TU
October	Bob	N2SU
November	Bob	WA2ISE
December	Carol	KD2NMV
January 2020	Gordon	W2TTT
February	Chris	KD2JQZ
March	Glenn	KD2MDR
April	Steve	K2SAB
May	Ahmed	NJ8Y
June	Charlie	AC2ZU
July	Jim	N2JLF
August	Walt	K3DQB
September	Gregg	N2ECH
October	Jim	W2KNG
November	Dave	KD2SGM
December	Bill	NB1ILL

2021 Dues Are Due

Dues for 2021 will be accepted by the club starting on December 4th with the 2020 Annual Meeting. There are no changes to dues for the upcoming year. Cutoff date is March 31, 2021.

Please make checks payable to "Fair Lawn Amateur Radio Club" and send them to

Bruce Kalogera NJ2BK
163 Meadow Lane
Secaucus, NJ 07094

Mail sent to the clubhouse will be delayed due to Covid. See website for other membership options.

2021 Member Profiles

Here is a list of the 2021 monthly profiles. See past profiles elsewhere in *The Resonator* to check back in the archives to see each featured member's background.

Month	Name	Call Sign
January 2021	Ed	KD2TVT
February	John	W2USN
March	Noel	W2MSA
April		
May		
June		
July		
August		
September		
October		
November		
December		

Want to be profiled? Send a note to wx2r@arrl.net and you too can become

Let's Play Two

With apologies to Ernie Banks (youngsters: go look him up), March looks like a great month to get in shape for outside radio and have a double header of Kawfee Tawks. For the first time ever, we are going to try it.

March 12th is a look at Seton Hall Prep's work with students in getting a pico balloon up and running and tracked with amateur radio. Dave Snyder KD2VGT is our presenter.

March 29th is a talk by Otis Vicens NP4G and the topic "How's DX? All About The IDEXA"

These are second and fourth Fridays, so they are special dates. But FLARC'ers are special, yes?!

And Even More Kawfee Tawks

Several club members have generously offered to do Kawfee Tawks to the club during 2021. We are taking them up on their offer and will be scheduling them starting later in the second quarter. If you have a topic you would like to share, let Ed WX2R know at wx2r@arrl.net.

Blood Donors Needed In This Time Of Emergency

The Red Cross and related organizations are in great need for blood donations since most corporate blood drives have been cancelled.

[Communitybloodservices.com](https://www.communitybloodservices.com) has a network of offices open during the week and would really welcome folks making appointments to donate blood.

Thanks!



American Red Cross

Fair Lawn Street Fairs

The club has approved our participation in the annual Fair Lawn Street Fairs and we have sent in our intentions to the organizer. The dates are June 13th and October 17th (both Sundays) obviously contingent up state guidelines impacting on such activities.

Both fairs are good opportunities to talk about ham radio and the club.... and even find dedicated new members such as Dave KD2MOB. The club can always use volunteers – contact Ed WX2R and express your interest.



New Member Profile, continued**How did you get interested in Ham Radio?**

My interest in radio communications started in the mid 90s, when my older brother (who was into CB radio) tried to convince me into getting a CB; needless to say, I had no interest in radio. He eventually convinced me into trying to make contact with him using SSB mode from my apartment in Jersey City to his home in Tinton Falls. Eventually I started to meet a lot of people over the air; some were really interesting and some you wanted to stay very far away from. I eventually got into SSB and when I heard a station from the UK on channel 38 LSB, I thought that was absolutely amazing.

That sparked my interest in chasing DX and advancing my skills and at that point Ham Radio was introduced to me by other CBers. I was now totally focused on getting licensed, so I studied for my Tech exam and in 2002 I became licensed.

Then, to complete my goal I had to copy 5wpm CW in order to get my General – which was my ultimate goal from the beginning. So after hours of listening to cassette tapes, I passed my General exam. I was assigned the call **KC2IZJ** by the FCC; but I wanted something a little more personal, so I applied for a vanity call and was able to acquire **W2MSA**.

The MSA in my call represents my three kids: Marc, Stefanie and Amanda; the W was the only prefix letter available. I should've pursued my Amateur Extra but was having so much fun that I didn't bother.

Now it was time to make DX contacts and collect QSL cards. Even though I'm not really an award chaser, I have been able to accumulate the following awards throughout the years: WAS, Grid Square, WAC and US county award.

My most memorable contact took place while mobile in Madison, NJ. I was listening to a station on 10M; I didn't recognize what country

Continued on page 39.

**FLARC February 13, 2021
VE Testing Results**

With VE testing back on a trial basis, Gene WO2W reports the following results:

Name	Call	License Earned
Arthur Khaytin	KD2VRP	Technician
Julio Bermudez	KD2VMZ	Extra
Vladimir Goldstein	KD2PJL	General
John Chaplain	KD2VRO	Technician
Joseph DeRose	KD2VRQ	General
John Tripi	KD2VRM	Technician
Hipolito Ortiz	KD2VRL	Technician
Jan Skrzypczak	KD2VRK	Technician
Steven Martinez	KD2VRJ	Technician
Roy Simpadian	KD2VMZ	Extra
John Margroff	KD2VNI	Extra
Tony Marchesani	KD2VRN	Technician

Testing for March will be indoors, at the Ridgewood Masonic Lodge - with "Covid Restrictions."

See page 2 of this Resonator copy, and also the FLARC website for the latest details.

**Six Special Interest Groups [SIGs]
Already Formed: Any Others?**

As we learned from the recent member survey, we may still be in lockdown but there is no lack of club interest as pooling our mutual interests in the many facets of ham radio. In just the last few months groups on POTA, DMR and satellites have formed.

Other possible groups (based on high personal interest) from the member survey, include:

- *Radio Propagation*
- *Antennas and how they work*
- *Kit building*
- *Raspberry pi & Arduino and*
- *Ham radio software*

Anyone interested in forming any of these (or other) groups should contact club president Nomar NP4H.



Image from May, 1926 QST, courtesy ARRL

The Way We Were

By Fred Belghaus W2AAB

The Story of a QSL Card

Archeologists can learn a lot from nothing more than a single artifact. They can learn about ancient cultures, their climate and environmental conditions, their diet, their probable diseases and main causes of death, their decline and fall. Historians study writings, artworks, architecture, and even ephemeral things, and learn even more.

Artifacts from our amateur radio past tell a story, too: an old transmitter or receiver; a copy of an old QST magazine; an old logbook, and of course, an old QSL. These can all teach us something, either about how technology has developed, what the amateur bands were like many years ago, fads and fallacies, and changing attitudes and interests among radio amateurs. Most of all, we can discover things about the people that once shared our interest in amateur radio.

We are more than our call letters!

Looking through some QSLs, I came upon this one. It sparked my curiosity.

MILLETT MORGAN 530 BOWDOIN ST., PALO ALTO, CALIF. CORNELL AB '37 MS in EE '38 STANFORD EE '39 PhD '40 exW1HDA, W80TD		BILL SUMERLIN BOX 544, STANFORD, CALIFORNIA STANFORD AB '37 EE '39 W6YX exW6YY	
A R R L		W6QJW RYAN HIGH VOLTAGE LABORATORY STANFORD UNIVERSITY CALIFORNIA USA	
Radio_____Ur_____		Xmtr _____	
Sigs RST_____Hr On_____		Ant_____	
_____PST		Revr_____	
REMARKS_____		QSL_____	
73 ES GUD DX_____		OP._____	

It is blank, and therefore, undated. From my research, however, I was able to determine that it dates from the late 1930s. How did I get there, and what else did I find out about the story of this not-so-ancient artifact?

First, I had to find out about the Ryan High Voltage Laboratory at Stanford University. What was it? What did they do? Who established it, and does it still exist?

The Way We Were, continued.

My search first led me to a biography of Harris J. Ryan, for whom the Ryan High Voltage Laboratory was established in 1926, to recognize his significant contributions to the study of high voltage phenomena. Ryan attended Baltimore City College and Lebanon Valley College for three years, then Cornell University, from which he graduated in 1887. He was employed by Western Engineering for one year, before returning to Cornell to teach. [1]



Professor Harris J. Ryan
Image: Wikipedia

While still a student at Cornell, he visited a plant operated by Frank Sprague (of capacitor manufacturing fame), and was inspired to pursue serious studies of high voltage transmission. Ryan was first to employ the use of cathode ray tubes as a research instrument, after receiving samples from Germany, where they were first developed. In 1903, Ryan published a paper on the use of cathode ray tubes as a means of studying the properties of alternating current. In 1906, he was awarded a patent for an “electric wave form tracer” which he used for the study of corona discharges and the size and spacing of high voltage conductors. His findings were published earlier, in a paper of the A.I.E.E. (American Institute of Electrical Engineers) in 1905. [2]

Also in 1905, Ryan left his teaching position at Cornell to begin his tenure at Stanford University, where he continued to study high voltage phenomena. Ryan published many papers in professional journals. In 1915, he published a paper on high voltage discharges at radio frequencies, which appeared in the Proceedings of the I.R.E. (Institute of Radio Engineers). As part of his research for that paper, Ryan developed an improved “megger,” [3] which is a type of megohmmeter used for testing insulation resistance of various types of insulators.



Manually operated “Megger”
Image: Wikipedia

The Way We Were, continued.

A high voltage is applied, and the resistance of the insulator is measured. [4] The higher the resistance, the better the insulator, and vice versa. For a detailed article about “meggers,” and how they are used, see Note [5].

The results of Ryan’s research revealed that porosities in some porcelain insulators made them unsatisfactory for power transmission systems. He recommended their replacement with insulators made from fused clear quartz. Ryan was made a member of the National Academy of Sciences and also served as President of the A.I.E.E. In 1925, he was awarded the Edison Medal for his contributions to the study of high voltage transmission. [6]

There are a number of photographs available online taken at the Ryan High Voltage Laboratory. These are copyrighted, but can be viewed at the following Notes [7] through [11]:

- Professor Ryan at work in the laboratory – Note [7]
- “Lightning Generator Set in Act at 1500,000 (sic) Volts” – Note [8]
- (Unidentified apparatus) – Note [9]
- (High Voltage transformers, towers with catenary wires) – Note [10]
- (High Voltage transformers and other equipment) – Note [11]

Additional photographs can be found at Note [12].

For further research into the life and work of Professor Ryan, I refer you to the following additional resources:

- For a list of the papers published by Professor Ryan, see – Note [13].
- Members of the IEEE may access the paper,
“Harris J. Ryan and High Voltage Engineering,” at – Note [14].
- For an extensive biographical article about Professor Ryan
and his technical achievements, see – Note [15].

But what about the two amateur operators listed on that QSL card? Who were they, and what, if anything, did they accomplish? I began my search for information about William Summerlin, W6BCF. Unfortunately, I could not find anything significant about him, except for Call Book listings and brief statements appearing in QST Magazine.

In 1932, William T. Summerlin, W6BCF, resided in Coronado, California. [16] By the spring of 1936, his address is given as Branner Hall, Stanford University; but it adds that his station was located at the Radio Communications Laboratory. [17]

In the February, 1932 issue of QST Magazine, he is mentioned as “trying for ORS,” meaning that he was hoping to become an Official Relay Station through his activities in message handling. [18] He is mentioned again in the October, 1933 issue as working at radio station KFSD, probably while still in his teens. [19]

The Way We Were, continued.

I was curious about KFSD, so I did a little further digging, which revealed that KFSD was originally licensed in 1926 for 620 kHz, and later 600 kHz. The call letters stood for “First in San Diego.” It remained on 600 kHz until 1963, when their AM, FM, and TV station switched call to KOGO, this call reportedly chosen by interrogating an IBM computer as to which call “would be best to represent San Diego and its people.” With the peculiar logic of computers, it chose KOGO; but the reasoning for this choice is unknown. After a change in ownership, the call was changed to KXGL as an FM station, but the station failed, and later became KJQY/KJOY, on 94.1 FM. [20] The call KFSD now belongs to an AM station in Escondido, California, licensed for 1450 kHz; but at last report, the station went dark in 2019. [21]

The last listing I could find for W6BCF was in the winter 1946 Call Book, showing a Box address at Stanford University. There is no listing for William T. Summerlin in the 1982 Buckmaster Name Directory of amateur licensees, nor in current FCC records. Any further work he may have done in high voltage research, or any other aspect of electrical engineering are unknown. If anyone reading this can furnish additional information about William T. Summerlin, ex-W6BCF, please contact your columnist.

My next project was to research the second call on that QSL card, W6QQJ. Here, I had greater success. His full name was Millet G. Morgan. Morgan had an illustrious career in electrical engineering.

He was born January 25th, 1915, and died January 14, 2002. He earned both Bachelor and Master Degrees at Cornell, and his Doctorate at Stanford. Among his achievements was the development of X-band RADARS for use on U.S. Navy ships during World War II while employed at the Submarine Signal Company. He also developed RADAR countermeasures equipment while at Caltech. In 1947, Morgan joined Dartmouth College, working at the Thayer School of Engineering, where he established the Radio Physics Laboratory. He remained in this post for the remainder of his career. [22]

But Morgan diverged from his interest in high voltage engineering. Most of his work was in R.F. For one thing, unlike Summerlin, Morgan remained an active amateur radio operator for many years. The last Call Book listing for Morgan as W6QQJ appears in 1940, when he was located in Palo Alto, California. [23] The next Call Book listing for Morgan is in 1942, but under his new call, W1HDA, in Hanover, New Hampshire. [24] He held this call for the remainder of his life.

In the 1940s and '50s, Morgan established a research station near his home in New Hampshire, where he and his colleagues used RADARS to study the propagation of signals entering the ionosphere. During the International Geophysical Year (IGY) in the period 1957-58, Morgan was Chairman of the U.S. National Committee Panel on Ionospheric Research at the National Research Council. He then served as senior scientific representative to the IGY at the U.S. Antarctic station at the Weddell Sea. [25]

One of his final academic projects was the study of gravity waves in the lower atmosphere in the 1980s, using a network of RADAR observation stations. [26]

One of Morgan's other interests was the study of “Whistlers.” Whistlers are short-duration sounds resulting from the generation of electromagnetic energy during lightning discharges. They occur in the ELF and VLF ranges, from 30 Hz to 3 kHz, and from 3 kHz to 30 kHz. They cannot be heard by the

The Way We Were, continued.

human ear without employing receivers or wideband audio amplifiers capable of detecting and amplifying these phenomena in this frequency range. [27]

Morgan was Director of the Whistler Project at the Thayer School of Engineering, assisted by W.C. Johnson, W1FGO. One result of their work was a very interesting article published in QST Magazine in 1960, in which is described a simple, vacuum tube receiver and rotatable loop antenna that amateurs could build to listen for whistlers. [28]

By the time of Morgan's death in January, 2002, he had authored 118 publications in book form and professional papers appearing in more than 200 professional journals, [29] and made significant contributions to the study of ionospheric and gravitational wave propagation. He was the subject of a tribute by the IEEE (Institute of Electrical and Electronics Engineers), citing his academic and professional achievements, including his serving as professor of electromagnetic field theory, antenna design, and magneto-ionospheric physics, among other related areas. [30]

He even produced, with Harold E. Dinger of the Naval Research Laboratory, an LP record called, "Ionosphere," recorded in 1955, which is a recording of noises generated by ionospheric phenomena, such as whistlers and rain static, among others. The sounds were collected from Morgan's own Thayer School of Engineering at Dartmouth College, as well as the Naval Research Laboratory in Washington, D.C. [31] "Ionosphere" was released on the Road Recordings label by Cook Laboratories of Stamford, Connecticut. To read the album's liner notes, see the link at Note [32].



"Ionosphere" album cover

Image: <https://poundforpound.me/music/2016/4/19/harold-e-dinger-millett-g-morgan-ionosphere>

If you're a true radio-head (and aren't we all), you can hear part of the LP here....

https://www.youtube.com/watch?v=0a_o1NV6I4Y

The whistlers are easy to identify. They start at a high frequency and sweep down in frequency, accompanied by lots of VLF static crashes. There are also A.C. power line buzzes, a snippet of the old WWV time signal, a voice from an unidentified broadcast station, and even a little Morse code at the end. Sheer entertainment!

The complete recording can also be purchased from the Smithsonian Institution's Folkways Group. See Note [33]

The Way We Were, continued.

If that isn't quite bizarre enough, Morgan also theorized, around 1960, that he might be able to generate artificial whistlers by using the natural resonant frequency of a small island in the South Shetland group in the Antarctic as a natural antenna. Here's the island:

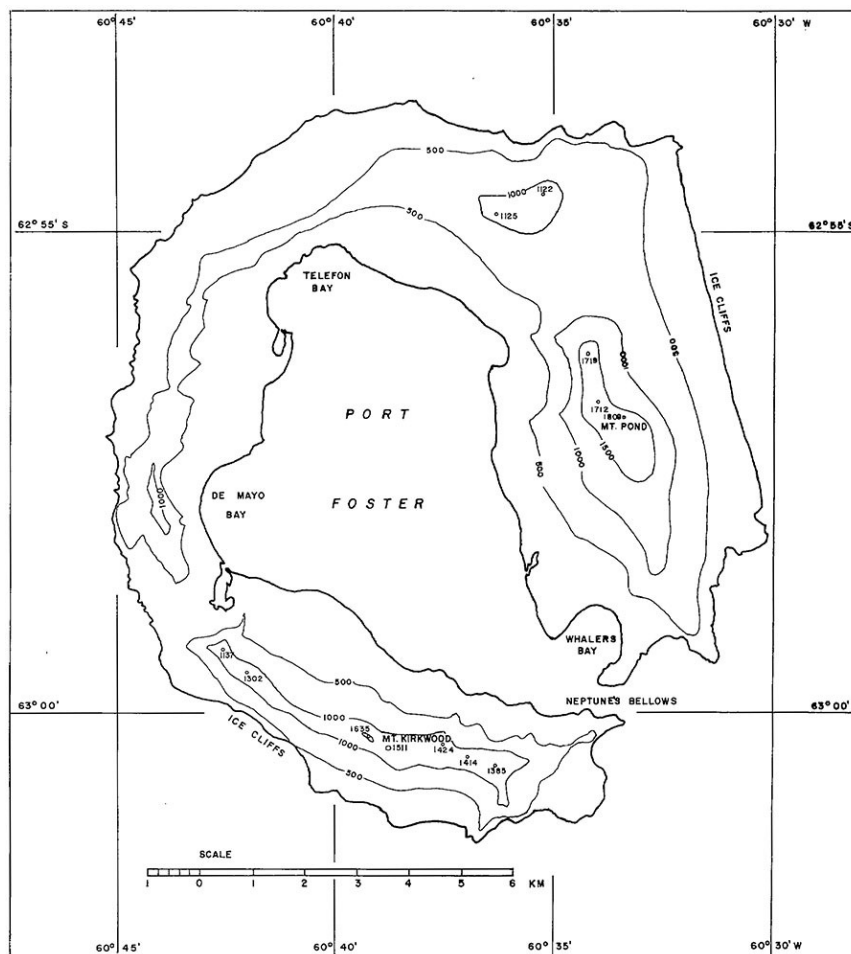


Image: <https://bldgblog.com/2013/01/antarctic-island-radio/>

This subject is covered in two fascinating articles, too lengthy to detail here, but that I recommend for further reading, if you are adventurous enough. [34] [35] I cannot discover any evidence online as to whether or not Morgan ever succeeded in proving his theory.

Nevertheless, Morgan left behind an enviable legacy that is a credit to both the professional and amateur radio communities. But Morgan wasn't the only prominent member of the electro-physical world to have been associated with the Ryan High Voltage Laboratory.

Probably the best known person in electrical engineering who had also been associated with the Laboratory was Frederick E. Terman, who was later a Professor at Stanford's Electrical Engineering Department. Terman was the author of several classic engineering texts, the best known of which is *Radio Engineering*, which has been published in several editions. It was, for many years, a standard text in E.E. courses. It has also been translated into several languages. Terman, like Morgan and so many others, began his interest in radio engineering by way of amateur radio. His call was 6AE back around 1920. [36]

The Way We Were, continued.

As to the Ryan High Voltage Laboratory, I am unable to confirm its present existence. The only clear references about it to be found online refer to past activities there.

A writer's inspiration may come from many sources: a personal recollection, an unforgettable character once met, a voyage, a love affair, the death of someone dear. Inspiration can also come from the little things: a sunset, a babbling brook, the smile on a pretty girl's face, and countless other things. For me, inspiration came from an old, 1930's era QSL card, and the story it had hidden in its printer's ink. That story just had to be dug out from the past, and brought to life. I hope you enjoyed the story of this old QSL card.

Until next month, 73,

Fred W2AAB

NOTES:

- [1] "Harris Ryan – Biography," Engineering and Technology History Wiki, at: https://ethw.org/Harris_Ryan
- [2] Ibid.
- [3] Ibid.
- [4] Wikipedia article: "Megohmmeter," at: <https://en.wikipedia.org/wiki/Megohmmeter>
- [5] "Megger – Working Principle Types History of Megger," Electrical 4U, October 27, 2020, at: <https://www.electrical4u.com/megger-working-principle-types-history-uses-of-megger/>
- [6] Note [1] Ibid.
- [7] "Ryan High Voltage Lab," Stanford Historical Photograph Collection, at: <https://exhibits.stanford.edu/shpc/catalog/vn290gm6526>
- [8] Ibid, at: <https://exhibits.stanford.edu/shpc/catalog/kb619nf8772>
- [9] Ibid, at: <https://exhibits.stanford.edu/shpc/catalog/fd375gd7077>
- [10] Ibid, at: <https://exhibits.stanford.edu/shpc/catalog/yf004mf5414>
- [11] Ibid, at: <https://exhibits.stanford.edu/su-photos/catalog/qs882yk4031>
- [12] "Ryan High Voltage Laboratory Stanford," (via Google) at: <https://www.google.com/search?sa=N&sxsrf=ALeKk00TW-F1VqJRGTq-xNjIGUs7oKHPPQ:1606877047175&source=univ&tbm=isch&q=ryan+high+voltage+laboratory+stanford&ved=2ahUKEwjvsOC8o67tAhWWGVkFHVHAC9w4ChCMmQR6BAgGEAE&biw=1280&bih=881>
- [13] Hartwig, Daniel, "Guide to the Harris J. Ryan Papers," Online Archives of California, October, 2010, at: https://oac.cdlib.org/findaid/ark:/13030/kt9x0nf5w1/entire_text/

The Way We Were, continued.

- [14] Brittain, J.E., et al, "Harris J. Ryan and High Voltage Engineering," Scanning the Past, Proceedings of the IEEE, Vol. 84, Issue 11, November, 1996, [Member log-in required] at:
<https://ieeexplore.ieee.org/document/542419>
- [15] Durand, W.F., "Biographical Memoir of Harris Joseph Ryan 1866-1934," National Academy of Sciences of the United States of America, Biographical Memoirs, Vol. XIX, Ninth Memoir, at:
<http://www.nasonline.org/publications/biographical-memoirs/memoir-pdfs/ryan-harris-j.pdf>
- [16] Radio Amateur Call Book Magazine, Fall, 1932, Vol. 13, No.3, September, 1932, p. 71.
- [17] Radio Amateur Call Book Magazine, Spring, 1936, Vol. 17, No. 1, March, 1936, p. 106
- [18] QST Magazine, February, 1932, "Communications Department," Pacific Division, San Diego Section, p. 58.
- [19] QST Magazine, October, 1933, "Communications Department," Pacific Division, San Diego Section, p. 49.
- [20] Wikipedia article, "KFSD," at: <https://en.wikipedia.org/wiki/KFSD>
- [21] "KFSD-AM 1450 kHz Escondido, California," Radio-Locator, at:
<https://radio-locator.com/info/KFSD-AM>
- [22] "Millett G. Morgan – Biography," Engineering and Technology History Wiki, at:
https://ethw.org/Millett_G._Morgan
- [23] Radio Amateur Call Book Magazine, Winter, 1940-41, Vol. 21, No. 4, December, 1940, p. 113
- [24] Radio Amateur Call book Magazine, Spring, 1942, Vol. 23, No. 1, March, 1942, p. 15
- [25] "Professor Millett G. Morgan (Obituary)," Dartmouth Engineering, March 4, 2011, at:
<https://engineering.dartmouth.edu/news/professor-millett-morgan>
- [26] Ibid.
- [27] "LMRO Whistler Receiver," Leon Mow Radio Observatory, at: https://asv.org.au/lmro_whistler
- [28] Johnson, W.C., W1FGO, "How to Listen to Whistlers – Amateur V.L.F. Observation," QST Magazine, May, 1960, p.50-54. (A.R.R.L. Membership required to access article).
- [29] "Morgan, M. Granger (Millett G.)," OCLC WorldCat Identities, at:
<http://worldcat.org/identities/lccn-n87810946/>
- [30] "In Memoriam: Millett G. Morgan," IEEE Antennas and Propagation Magazine, Vol. 44, No. 1, February, 2002
- [31] "Pound for Pound: Harold E. Dinger and Millett G. Morgan—Ionosphere," April 21, 2016, at:
<https://poundforpound.me/music/2016/4/19/harold-e-dinger-millett-g-morgan-ionosphere>

The Way We Were, continued.

[32] "Ionosphere," at: https://media.smithsonianfolkways.org/liner_notes/cook/COOK05013.pdf

[33] "Ionosphere," at: <https://folkways.si.edu/ionosphere/sounds/album/smithsonian>

[34] Manaugh, Geoff, "Plasma Bombs and Sky Bridges," BLDG Blog, August 15, 2016, at: <https://www.bldgblog.com/tag/radio/>

[35] Manaugh, Geoff, "Antarctic Island Radio," BLDG Blog, January 1, 2014, at: <https://bldgblog.com/2013/01/antarctic-island-radio/>

[36] Scaruffi, Piero, "Stanford and Electrical Engineering," Chapter 2, "The Scouts," excerpted from A History of Silicon Valley, at: <https://www.scaruffi.com/svhistory/sil2.html>

The FLARC Member Survey: Fun Facts

Some interesting data on the demographics of our club members came out in the 2021 Member Survey:

- Six in ten members are from a technical background
- Half of all members hold Extra Class licenses
- One in five respondents have been hams for three years or less.
- One in eight have been hams for 50 years or longer
- Four in ten belong to a volunteer organization such as RACES/CERT/ARES
- One in six members are under age 50; three in ten are age 70 or older
- **Half the club (47%) have been members for FOUR years or fewer**



Pop Up Tuesdays Are Back!

Beginning March 9th and then every Tuesday from 7-8PM will be an open Zoom meeting, to catch up with other members and maybe even friends and potential members.

The Zoom will be leaderless, so be prepared for an unscripted get-together session. Formal dress is optional.

Watch your emails for links and passwords. These sessions are at your request from the member survey. Let's take advantage of it until we can get back into the clubhouse again.

Around the Shack

Hal Kennedy N4GG/4

Matching with L-Networks

Last month I wrote about transmit quality mica capacitors. I mentioned in closing that this month's Around the Shack would describe their use in L-Networks.

Okay, okay - before you tune out with the thoughts: "Wonky, won't understand, I don't build, not digital, probably too much math, etc." please bear with me. You have antennas, yes? They sometimes have an SWR other than 1:1, yes? Maybe you want to use an existing antenna on a different band, or just try something new? Maybe you want an extra dB or two out of an existing antenna? Maybe you want to change a single band antenna into a dual band antenna? Maybe you want more bandwidth out of an existing antenna? A simple L-Network can often get you these things and it will be a snap to make. Please trust me on the "simplicity" part. Can you solder? Then you can make an L-Network. It's only two parts, a capacitor and an inductor.

When I wrote last month's column on transmit quality mica capacitors I wondered if subjects like that, admittedly directed toward the niches of HF, QRO, the low bands and DIY are of interest to more than one or two people.

Meanwhile, something arrived in the mail to convince me I might be writing for an audience of more than one.

That "something" was the February, 2021 QST which arrived the day after I submitted last month's article to the editors. Low and behold, there on page 33 is the article Using Your 160-Meter Vertical on 80 Meters, and one of the key components used in the design is a transmit quality mica capacitor.

The photo that appears on page 34 in the QST article is shown here as Figure 1. It is used with the permission of the ARRL.

Note the capacitor in the center of the photo. It's not only a transmit quality mica capacitor - by coincidence it's identical to the one shown as Figure 4 last month. I have included it here as Figure 2. The QST copy reads: "My unit uses a fixed 300 pF surplus silver mica transmitting capacitor from a friend's junkbox."

I mentioned last month that the two best places to find capacitors of this type are in musty cardboard boxes at hamfest flea markets and your best friend's junkbox.

I love it when a plan comes together.

As they say on TV: "But wait, there's more!" This month's article is about L-Networks and I was wondering what to use for a picture of one. I'm writing away from my home QTH. I had the capacitor pictures from last month, but no picture of a typical inductor or a capacitor and inductor together to form a network. There is an L-Network out back at N4GG but I'm not home to take the picture - QST to the rescue.

Around the Shack, continued

Refer again to Figure 1. In addition to the transmit quality mica capacitor, a typical inductor is shown. The article describes a network that is similar to an L-Network and uses the same parts.

Now, ahem, the question is still on the table. Is this of interest to you? It should be if you are on HF or six meters because L-Networks can accomplish those things mentioned above and because you might want to know more about the ones you already own. Yes, you may own and be using one or more L-Networks. Antenna tuners frequently use L-Networks. The antenna tuners built into higher-end HF radios also use them.

To obtain a design for an L-Network I use the software program "TLW" (*Transmission Lines for Windows*). TLW comes with the ARRL Antenna Book and is invaluable for determining the loss in transmission lines. It includes built-in models for all the common coax types as well as for ladder line (window line) and open wire line. It also designs L-Networks and Pi networks that will match an antenna to 50 ohms and it does that without effort on the user's part.

Let's take a look at a common case where we are going to need a matching network of some kind. Figure 3 shows an inverted-L for 160 meters. I choose random lengths for the vertical and "horizontal" wires such that the antenna is too long for 160 meters. It's resonant around 1.5 MHz. The "horizontal" wire is sloping. I did that because in my experience that's how most of them wind up.

Making 160 meter verticals and inverted-Ls "too long" is a good practice. It raises the point of maximum current up off the ground. That's a good subject for another column.

If we have the antenna in Figure 3 up and ready to go, the next step is to measure it with an antenna analyzer at the operating frequency of interest. In this case that's 1.83 MHz. An MFJ-259 would be fine for the task as would any of the many new antenna analyzers hitting the market. If the antenna is not up and just a concept, you will need to model the antenna, or have someone do it for you. Someone who is familiar with modeling can model the antenna in Figure 3 in one or two minutes. It's only two wires.

At my away-from-home QTH I don't have an antenna like Figure 3 to measure, so I used EZNEC to model the antenna at 1.83 MHz. The model says the feed-point impedance is 25.07 ohms resistive and 219.5 ohms reactive.

Now, let's stop here for a moment and recognize something. You don't have to understand anything I just wrote. You don't need to know what reactance is. You don't need to know how to model antennas if you can take an antenna analyzer and measure the antenna you are working with. You can also call an old salt like me and he or she will model an antenna for you. Don't be intimidated. There is no math and very little knowledge needed.

Take a look at Figure 4. This is the front page of TLW. It might look complicated at first glance, but it really isn't. There are four things to fill in and then the program does the work. The first two selections, up at the top, are to choose a transmission line type from a pull down menu, and its length. In this example I chose RG-213, and I set the length to 0.001 feet. I did that because I wanted the L-Network calculated to be at the antenna. Had I used a typical transmission line length,

Around the Shack, continued

for example 200 feet, then the program would compute an L-Network matching network for the far end (shack end) of 200 feet of coax. The base of the antenna is a better place for the matching network in this case, but the shack end is certainly convenient.

The third thing to fill in is the frequency of interest. In the upper right corner I entered 1.83 MHz. Following? Easy so far, right?

The last entry we need to make goes into the columns labeled “Resistance” and “Reactance” in the center of the page. In this case I used the numbers I got from the antenna model – 25.07 ohms resistance and 219.5 ohms reactance. Remember these numbers could have come from a measurement with an MFJ-259. If you design antennas a lot and/or do some reading, you can also approximate these numbers and guess pretty close!

You will see lots of other numbers in Figure 4 and you can ignore them. The program fills things in with defaults and works with the numbers you have entered to offer some answers in addition to the L-Network that’s going to be needed. Notice at the bottom of Figure 4 TLW has told us that without a matching network the SWR at the antenna is going to be 47:1! WE WILL need a matching network!

Okay, now that we have our numbers loaded into the front page of TLW we click that button in the lower right labeled “Tuner,” and up comes Figure 5. Here it is, our L-Network. Designed and ready to go.

The diagram at the bottom of the figure tells us what we need and how to hook it up. Notice on the left side it says 50.0 ohms. That’s where our transmission line will connect and the SWR will be 1:1. On the right side it says 25.07 ohms resistance and 219.52 ohms reactance. That’s what we entered on TLW’s front page. That’s the antenna.

The diagram tells us we are going to need a 347 pF capacitor and a 4.6 uH inductor. Also note something called “CStray.” By default the program assumes random wiring and connections will add a few pF across the antenna. It’s there for the sake of accuracy and can be ignored. Before we figure out where the two parts we need are going to come from, we need to take a good hard look at the columns labeled “L1” and “C2.” All the numbers are for 1500 watts of power at the antenna. Elsewhere within the program you can change the power to any number you wish. The program has plugged in quite a few default values to do its calculations and these are shown. If you have a good technical understanding you will recognize them and if not, don’t worry about it. The defaults will get you close enough.

Looking at the “C2” column we see the peak voltage across the capacitor is 2661 volts! The current through the capacitor is 7.5 amps. This requires exactly what I described last month – a transmit quality mica capacitor. The one in Figure 2 is rated at 5000 volts and 2.7 amps. It has plenty of margin for voltage, but we would be pushing our luck to use this capacitor based on its current rating. I have pushed my luck and used capacitors of this type at twice their rated current, but I can’t guarantee you will get away with it. Working in our favor is the fact we will see something less than 1500 watts at the antenna due to transmission line loss and on CW and SSB the duty cycle is well

Around the Shack, continued

under 100%. To get a current rating that is more conservative we will require two capacitors in parallel. The value of capacitance is not critical. A capacitor of approximately 300 pF (just like Figure 2, again!) and 50 pF in parallel will work fine. Current will split between the two capacitors and, although not equally, will probably be okay. Two capacitors of around 175 pF with high current ratings would be ideal (in parallel). An alternative is to use a single capacitor with a higher current rating. These are available if you shop the internet. In this application you sometimes see vacuum variable capacitors – they easily exceed the requirements.

Now let's look at the "L1" column. The inductor will have 387 volts across it (peak) and 5.2 amps running through it. The inductor will be homebrew and not difficult to make. Note the inductor in Figure 1. The author indicates it is 13 uH. We will need something just like it but with fewer turns to get us 4.6 uH. The formula for an inductor is in the ARRL handbooks and in many places on the web. The variables are the diameter of the coil, the number of turns and the turns per inch. My preferred coil form is a drinking glass you can buy at Target for \$1. They are about 3 inches in diameter and made of polycarbonate. Polycarbonate is rugged and UV tolerant. I cut the bottom off the glass, drill a hole at each end (just like in Figure 1) and wind the number of turns the formula tells me I need. If you use a \$1 drinking glass from Target you get your choice of color!

Here are two things to note.

First, column "L1" tells us we could expect to dissipate 7 watts in the inductor. That's based on default assumptions and will be directly affected by the wire gauge we use. 5.2 amps and 7 watts are not big numbers for an inductor. The QST author used #10 wire in his network. That's an adequate choice for this design as well. Lowes sells #8 and #6 wire by the foot. The heavier the wire the less loss you will incur. I'd probably use #6. Only a few feet are needed; cost isn't an issue.

Next, the last row under "C2" tells us the voltage at the antenna terminals will be 1696 volts RMS when running 1500 watts. That's about 2400 volts peak and it's RF. In the April, 2019 Around the Shack column, "QRO Considerations," I mentioned that 1500 watts at the base of a vertical generates enough voltage to cause bodily harm and set dry leaves on fire. Safety precautions are needed. Also, the insulator at the base of the vertical must handle the voltage, in the rain, with some safety margin.

If a vertical is a conventional quarter wavelength tall it will be around 35 ohms at resonance and the voltage present won't be challenging. In this example we are operating removed from the resonant frequency and that's often a scenario where voltages will be higher. It's possible to see many thousands of volts at antenna feed-points depending on the details of the case.

TLW is a useful program in many ways and this case is a good one to study carefully.

I hope I've convinced you that there are easy solutions to meet antenna matching needs. You can do this – you can. It's two components and solder. Go for it.

Referenced illustrations are on the following pages.

Around the Shack, continued

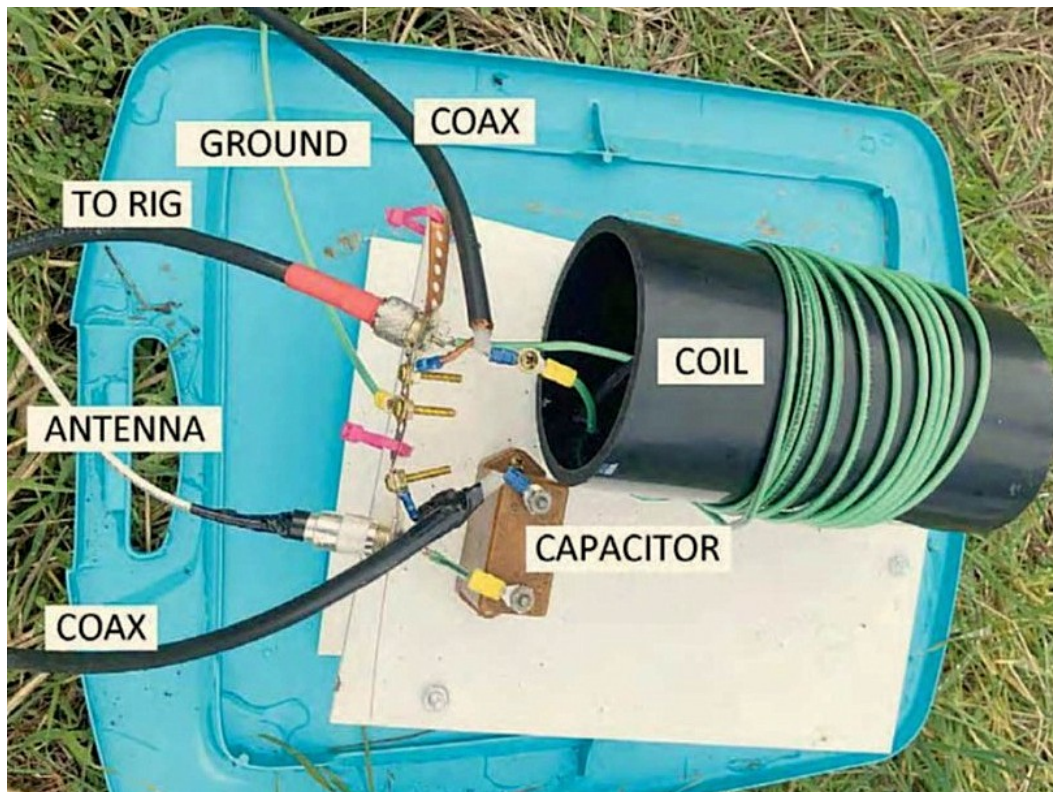


Figure 1. A coil and capacitor similar to that used in an L-Network.
From page 34, February, 2021 QST magazine. Used with permission of the ARRL.



Figure 2. The transmit quality mica capacitor that appeared as Figure 4 last month
and is identical to what appears in Figure 1.

Around the Shack, continued

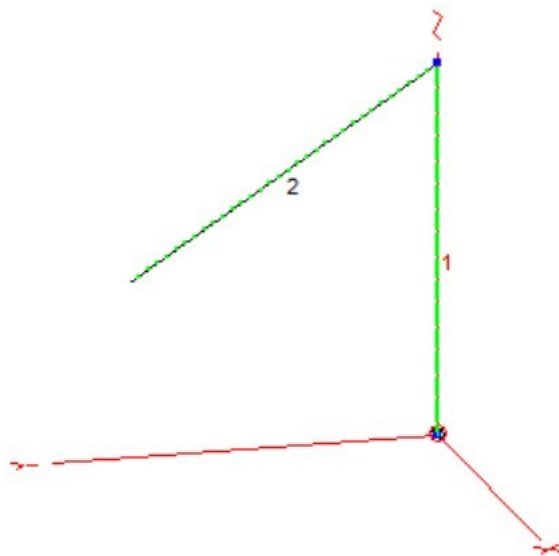


Figure 3. A “too long” inverted-L for 160 meters.
The resonant frequency is 1.5 MHz.

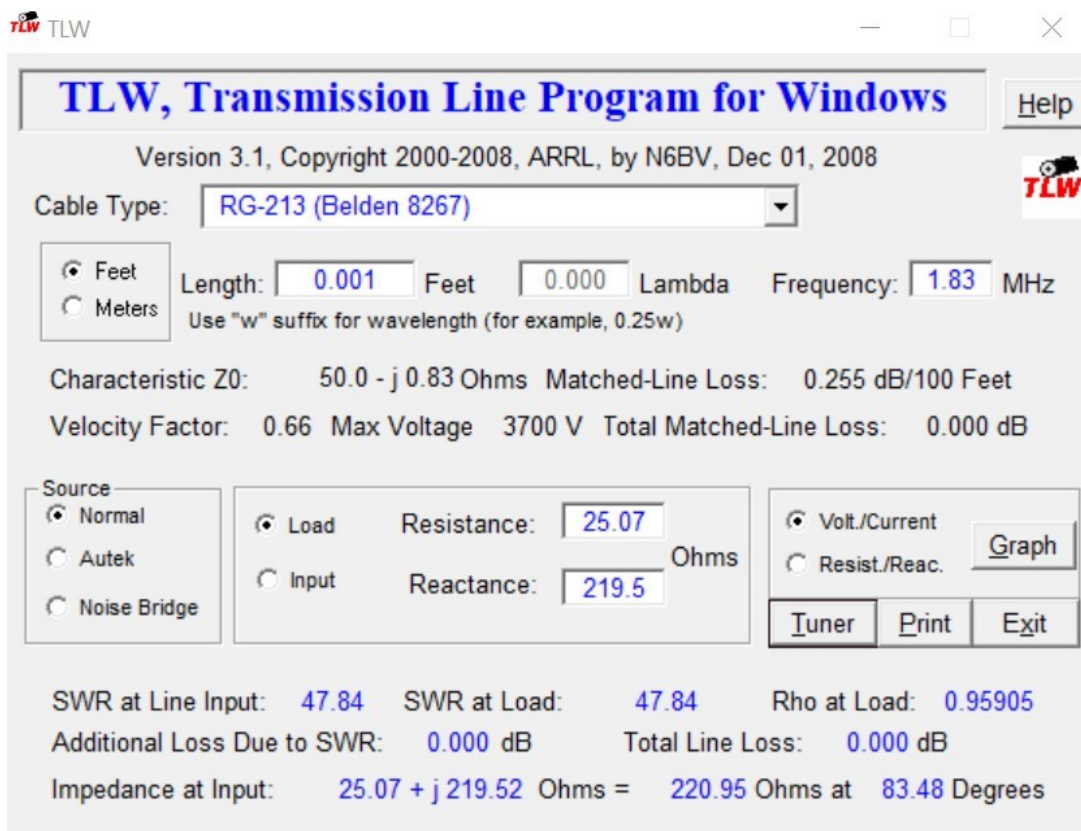


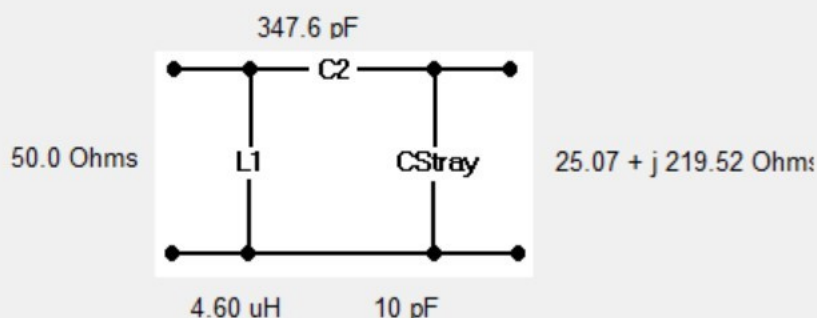
Figure 4. The front page of TLW software.
TLW is supplied with the ARRL Antenna Book.

Around the Shack, continued

High-Pass L-Network

RG-213 (Belden 8267) Length: 0.001 feet Frequency: 1.83 MHz
 At load: $25.07 + j 219.5$ ohms = 220.9 ohms, at 83.5 degrees Load SWR = 47.84
 Eff. Q = 0.9 1.5:1 SWR BW = Large, 2:1 SWR BW = Large
 Estimated power lost in tuner for 1500 W input: 21 W (0.06 dB = 1.4% lost)
 Transmission-line loss = 0.0 dB. Total loss = 0.06 dB. Power into load = 1478.8 W

At 1500 W:	L1	C2
Unloaded Q	200	1000
Reactance	52.895	-250.199
Peak Voltage	387 V	2661 V
RMS Current	5.2 A	7.5 A
Est. Pwr Diss.	7 W	14 W
RMS Vin:	273.86 V at -126.56 deg	RMS Vout: 1696.38 V at 0.00 deg.



Print

Main
Screen

Cancel

Figure 5. The L-Network solution page from TLW.

What in The World?

Last month Ed WX2R reported on a repeater QSO with Chris OE2WUM, who was attempting to gain WAS via Echolink. Something most would not try, but hours of fun nonetheless.

The reward for that QSO was an exchange of QSLs, of which Chris' is here.

For those with good memories, it is the Salzburg church where the *Sound of Music* wedding scene was filmed. Interesting hobby - this ham radio.



Ed - itorial :

The FLARC Member Survey

Once again FLARC members have answered the call and made their opinions known in the annual member survey. I am humbled by the response — again, 114 members (two out of three) took the time (and my pestering) to let the Council know of your thoughts concerning our future direction.

This has been a very “unusual” year to be sure. But we are optimistic about getting together again and want to see the club grow and flourish. What do we need to do to get there? I see several action items:

First is to provide a conduit to meet more often. Un-programmed Zooms for starters. Socially distanced activities such as W2MSA’s POTA get together at Tallman Mountain late last month, which had 11 volunteers as of this writing, is another. More people on the repeater — it is a graveyard most of the time even in lockdown. Figure out a way to meet in either a temporary location or at the clubhouse, under tight restraint as state guidelines and vaccination rates change, for those who want to.

Second is to take advantage of those who have offered to volunteer. Create additional Kawfee Tawks around hands-on activities and how-to’s for members, by members. A “SWAT” committee to help with antenna/station setup. A “Beyond Exams” committee to provide high interest topics across many interests. A planning committee (that includes fundraising) has been mentioned by some to help shape the future when (and if) the clubhouse returns. And, of course, members building off their personal interests to create more SIGs — which have been a lifeline in this plague year, along with the nightly (now weekly) Health and Welfare Net.

Third is revamping the existing committee structure. There are a few existing committees that neither meet nor report. Restructure them or remove them. The Education Committee has been

Ed - itorial, continued.

largely dormant; at the same time members have expressed an interest in creating new activities and projects such as “kit night.” We do VE sessions but not license classes. The Publicity Committee should morph into more of a Marketing Committee — as that is what it now seemingly does. Expand its role in community outreach and external education about ham radio. The Technical Committee seems fine but may need to recruit and replace talent that is leaving both the club and the area.

Fourth is to formalize membership and retention. There are many hams in the local NNJ area that are not members and our outreach has been hampered by Covid-19. Nearly half the membership can visualize a club that is either virtual or “beyond Fair Lawn” in geography — an interesting and exciting thought. But we need volunteers.

Involvement. Engagement. Contact. There is no magic formula, but it is a lot of blocking and tackling — the basics in keeping a club together and interested.

I have no doubt that we can be collectively successful. Thanks again for all your help in setting the direction.

— Editor Ed, WX2R

LIFE IS SIMPLE



CW is fun!

DMR Special Interest Group Update

FLARC DMR SIG DMR@FairLawnARC.groups.io

A Special Interest Group SIG for those interested in DMR (Digital Mobile Radio) communications and software.

The DMR SIG has big news.

It is about how to get into DMR and other Digital Modes **for free**, if you have a Windows PC or an Android Smart Device (Tablet or Phone). See the article "DMR via Windows PC and Android Smart Device" elsewhere in this Resonator issue.

We are still using TalkGroup 310015 on Tuesday evenings at 7:00pm to always be done before the NorthStar Digital Net, which is at 8:00pm on TalkGroup 31630.

Other NEWS:

FLARC will soon have its own DMR TalkGroup once some additional information is sent to the DMR network administrators. For now, we will continue to use TalkGroup 310015 -- thanks to Brad (KM2C) for letting us use his repeater's TalkGroup number.

For those interested in joining all the DMR excitement, contact

Bob H. at KD2BKD@optonline.net
for information on the DMR SIG.

Or just go to the club website **FairLawnARC.org** and use the "Join Special Interest Group(s)" link on left.

DMR Ham Radio.

Digital mobile radio (DMR) is an open digital mobile radio standard defined in the European Telecommunications Standards Institute (ETSI) Standard TS 102 361 parts 1–4 and used in commercial products around the

Radio Monitoring Special Interest Group Update

FLARC Monitoring SIG

monitoring@FairLawnARC.groups.io

A Special Interest Group SIG for those interested in SWL and other radio communications monitoring.

Over the last year I have gotten back into SWL driven primarily by having my old Kenwood R-5000 (originally bought at Gilfer Associates from my Elmer, Lee Bowgren WK2T SK) and repaired this Fall by Dave K2ZC. The world of DX beyond the ham bands has certainly changed a lot but there remains a lot to listen to if you spend the time to seek it out.

Our recent *Kawfee Tawk* by Paul Walker showed the passion and enthusiasm that AM DX'ing still holds for someone far younger than I. I got pumped just listening to him. Following social media, you can see that there are a lot of SWLers on Facebook sites such as and I have wondered who they are.

Part of the answer came from a question on a Reddit blog about how listeners have gotten into the hobby. I have learned that, while much has changed, much has still stayed the same. From a sample of about 30 people, I have gleaned the following:

A family member or parent has been a driving force. "My father had a radio... my dad was a ham... an uncle had a radio, and I would listen...."

I received a radio as a gift. The holidays or birthdays brought them a radio they always wanted.

The world is a big place, and it is amazing.

*"I could hear broadcasts coming from Russia or Germany and that just blew my f***** mind." "I love that there's always something to listen to. There is always someone broadcasting. Even in the loneliest corner of the planet, with a small radio and antenna you can listen to people all over the globe. There's always someone else out there".*

Surprise and delight.

"Listening to distant radio stations from anywhere on the globe is fun for me. It is just me, my radio and my

Continued on page 40.

DMR via Windows PC and Android Smart Device (No Radio, Hot Spot, or Dongle Required!)

By Bob Holstrom – KD2BKD

For those interested in getting into Digital Radio, *without spending any money*, and have either a Windows PC, or an Android Smart Device (phone or tablet) here is your chance to try it out.

There are programs to allow this: “DUDE-Star” for Windows PC and “DROID-Star” for Android. Connections to DMR, D-STAR, Fusion, NXDN, P25, M17, and others are possible. This program is also said to be able to be built for Apple MAC and Linux. Some modes require an AMBE dongle to transmit. For info about the “dongle” come join us in the DMR SIG.

“DUDE/DROID-Star” is similar to using the “Echo-Link” program. Now, with a Windows PC or Android Device, one can get onto the FLARC DMR SIG Net, to try DMR out. If you have any questions join the FLARC DMR SIG and we will be happy to get you started in DMR and other Digital Modes.

I will only be showing DMR settings here, as I do not know much about the other digital modes.

The document is divided into 4 sections.

- Section #1 is about “Getting a DMR ID”
- Section #2 is “How to set up a Brandmeister password”
- Section #3 is on “Setting up DUDE-Star on Windows PC”, and
- Section #4 is on “Setting up DROID-Star on Android Smart Device”

#1 - Getting a DMR ID

A DMR ID is required to get onto the DMR network.

If you already have a DMR ID you do not need another.

DMR ID is available at: <https://radioid.net/register>.

Check “I AGREE TO THE ABOVE TERMS, CONDITIONS AND POLICIES”, then click “Register Account.” Enter your Callsign, Email, and Password.

Country/Territory will automatically be entered from your callsign.

*If it is not correct you can have administration correct it after registration. **Getting a DMR ID may take a day or two to receive.***

#2 - How to set up a Brandmeister password

If you have not set up a password at

<https://brandmeister.network/>

you must do so.

Bob Holstrom – KD2BKD, continued.

Select Login (top right). Put in your "Callsign" and "Password"
If you never did this before, then select "Not a member? Register"

Registration will require confirming your email address by replying to an email,
and then waiting for another email confirming that your account is approved.
When your BrandMeister account is approved, log in as above and continue here:

Once you are in your "User Dashboard" click on your "Callsign" (top right) then select "SelfCare"
Here set "Hotspot Security" to be "On" and type in a "Password" — I suggest using the same password as you did for your BrandMeister Account.

#3 - Setting up DUDE-Star on Windows PC

For Windows PC go to:

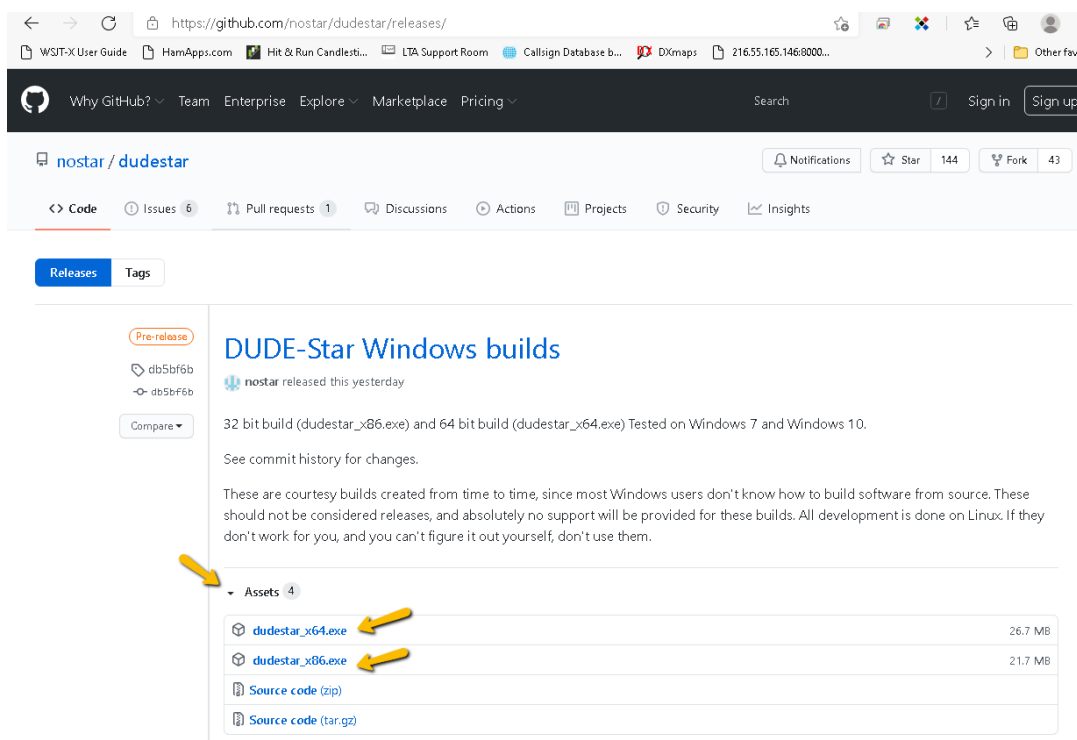
<https://github.com/nostar/dudestar/releases/>

Click the tiny arrow at left of "Assets" for drop-down.

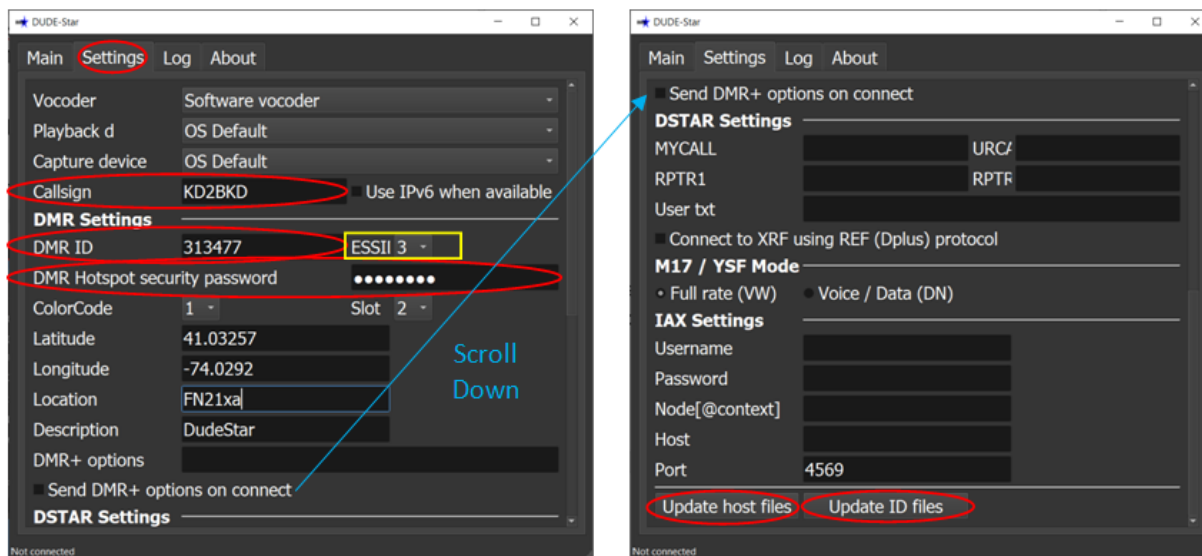
Builds for 64 bit "**dudestar x64.exe**" and 32 bit "**dudestar x86.exe**" are available. Download and run. ¹

Windows Defender may question running the program.
Select "More info" then "Run anyway".



Bob Holstrom – KD2BKD, continued.

“DUDE-star” runs directly from the .exe file and does not need to be “installed” – simply save the downloaded .exe file (above) to your desktop, or save to a folder and create a shortcut icon on your desktop for easy startup.

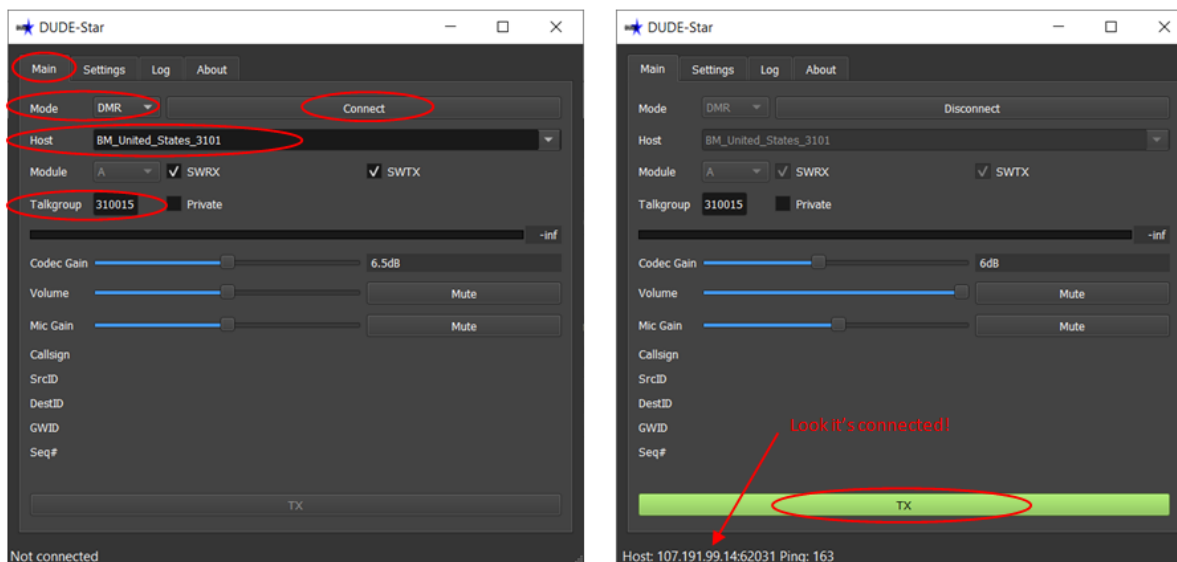


In “DUDE-Star” go to the “Settings” menu selected at the top left of the screen. Here enter your **Callsign**, your **DMR ID**, and the **Password** used for DMR registration above. **I have several HotSpots, so I made this one ESSID 03.** No need to change ESSID if this is the 1st time with a Hotspot or DMR radio. Now at the bottom of this window, select “**Update host files**” then “**Update ID files**” [see above].

Bob Holstrom – KD2BKD, continued.

Next click on “Main” menu at the top left of the screen.

Select Mode “DMR”, Host “BM_United_States_3101”, and enter Talkgroup “310015”.



At the top right of the “Main” menu, click on “Connect”.

The screen captures above show “DUDE-Star” is connected.

Click on the big green “TX” button at the bottom to transmit — you must **hold down** the left button of the mouse during the time you are transmitting; release the mouse to return to receive.

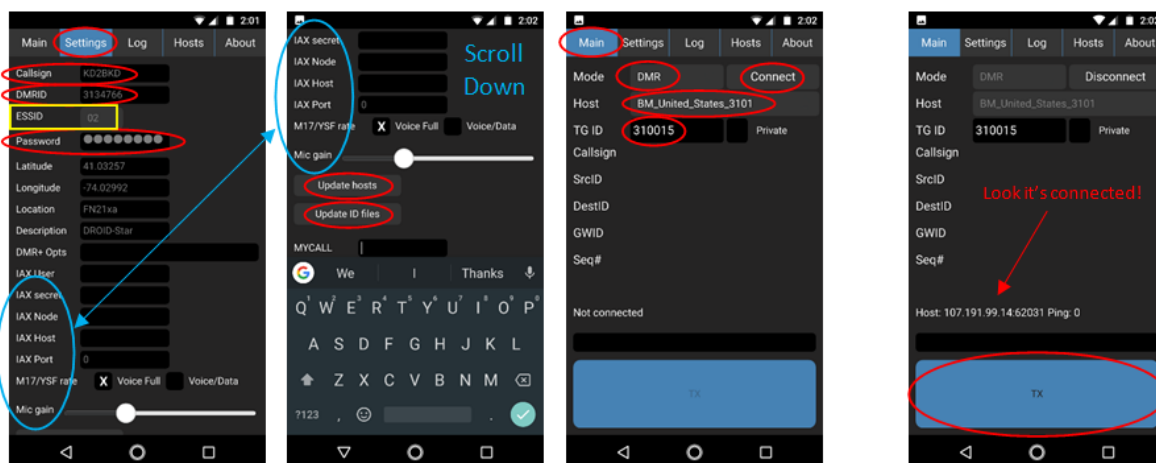
#4 - Setting up DROID-Star on Android Smart Device

At “Google Play” on your Android Smart Device, search for “DROID-Star” and “Install” it. Once installation is complete, start “DROID-Star.”

In “DROID-Star” go to the “Settings” menu selected at the top of the screen. Here enter your **Callsign**, **DMRID**, and **Password** used for DMR registration above. **I have several HotSpots so I made this one ESSID 02.** No need to change ESSID if this is the 1st time with a Hotspot or DMR radio. Now below this select “Update host files” then “Update ID files” — next go to the “Main” menu at the top left of the screen. Select Mode “DMR”, Host **BM_United_States_3101**, and TG ID “310015”.



At the upper right of the “Main” menu press “Connect”. Last screen capture below shows that “DROID-Star” is connected. Press the big blue “TX” button on bottom to transmit. *I had problems connecting to the Brandmeister DMR servers at first, but after reading that others had this problem the solution was to close “DROID-Star” then open it again and it worked as expected. You will have to select Mode “DMR” after restarting “DROID-Star”.*

Bob Holstrom – KD2BKD, continued.

Note: TalkGroup 310015 is the TalkGroup presently used as the FLARC DMR SIG Nets. We would like to thank Brad (KM2C) for the use of his 310015 DMR TalkGroup.

All other DMR TalkGroups can be accessed via “DUDE/DROID-Star” by just changing the “Talkgroup”.

Now you should be setup to use either a Windows PC or Android device to get onto DMR TalkGroups. Hope to hear all of you who are now DMR connected on the FLARC DMR SIG Net on Tuesday evenings at 7:00pm ET.

Note: Once you have registered for a DMR ID, all settings and changes are made at: <https://brandmeister.network/> using your Callsign and Password at the “Login” selection.

“DUDE/DROID-Star” is an open source application for amateur radio operators that allows receiving and transmitting of many different digital radio systems. “DUDE/DROID-Star” includes open source software to decode and encode the different digital systems and can be built and run on Linux, Windows, and Mac OSX. For more information see: <https://github.com/nostar/dudestar>

“DUDE-Star” and “DROID-Star” were brought to my attention by Steve KA2YRA during a FLARC DMR SIG net. Steve had both his AnyTone HT via HotSpot and “DUDE-Star” connected to the 310015 TalkGroup. He used his HT and then “DUDE-Star” to communicate to those on the net to compare the two. It seemed by most that “DUDE-Star” sounded smoother than the HT’s loud hard sound. Both were totally copy-able.

I would like to thank all who helped test this procedural article:

K1UH, KA2YRA, KC2ZMA, KD2MOB, KD2MYF, WA2CLP, W2JC, W2MSA, WP4F, and others.

Now it is time to experiment with other Digital Modes. Some DMR TalkGroups are linked to other types of Digital Modes. I was using Fusion (YSF) on Host (NJ-NY-PA-Tristat) via DROID-STAR and had a QSO with Steve KA2YRA by chance who was accessing NJ-TRBO Tri-State 31360 DMR TalkGroup via Hotspot.

All Digital Radio Enthusiasts are welcome to join the DMR SIG — as it is not just DMR anymore.

New Member Profile, continued

that call was from but he was working many stations – so I figured I'd give him a shout. After a couple of attempts, he came back to me with a 59, so I was happy. When I was closer to home I was talking to a local ham on the W2RN repeater and he asked me: was that you that worked **A92GR**? I said yes; he said he was calling him for an hour and couldn't get him. When I got home and looked up A92GR on QRZ.com and found out he was Bahrain, I couldn't believe it! After about 10 months, I was able to confirm that contact with a very nice QSL card.

What parts of the hobby interest you

I like to operate a little PSK once in a while but my main mode is SSB, and now I'm learning about DMR. I'm always interested in learning new things about the hobby and different DIY projects.

How did you find out about FLARC and what are your impressions?

I've always heard about FLARC and I've been to the old location on River Road, but I never thought of joining. I met Nomar NP4H at a BARA hamfest and being both Puerto Rican we hit it off from the start. He highly recommended joining FLARC. Then I met David NK2Q and he also recommended FLARC, so I joined. I love how active the club is and how they encourage the members to participate in many different ways. The members are friendly and are always willing to help each other.

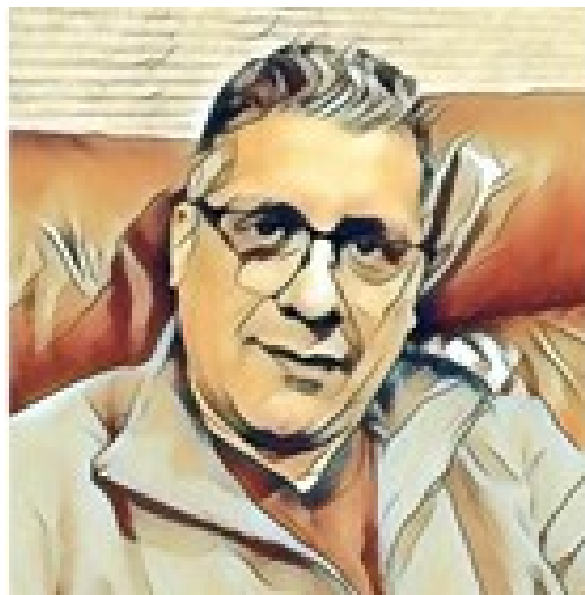
What else can you tell the club about yourself?

I love this hobby because there's something for everybody. The camaraderie is great. You can advance at your own pace. The elmering is always offered by other hams and you get to meet people from all walks of life.

New Member Profile, continued

What other ham related clubs or organizations do you belong to?

Lately I've been experimenting with Portable Ops, home brewing equipment and Contesting. Fred W2AAB noticed my participation in several contests throughout the year and offered to be my sponsor to join the prestigious Frankford Radio Club, so I graciously accepted. I'm also a member of BARA and a former member of the 10-70 Association and the Nutley Amateur Radio Society. I also participate in Parks On The Air "POTA", OMISS, and I'm also in charge of the FLARC Portable OPs SIG.



“NJ’s Largest Club Remains The Best Club” – The 2021 FLARC Member Survey

Club Trustee Ed Efchak WX2R was February’s *Kawfee Tawk* speaker on February 19th and provided an overview to the annual member survey. Two-thirds (67%) of the membership participated in the survey and had very favorable reviews of the current state of the club and where it is headed.

Among the highlights:

- A majority of members *want the club to continue to grow* in both size and reputation.
- There continues to be *high satisfaction* in the current direction of the club but the overall rating score is marginally lower than last year – driven mostly by long-time members.
- Satisfaction levels for the club operating during the pandemic is lower than the overall satisfaction for the club—but it is still high.
- *Having more projects and items that involve learning* are very important to members as well as more *activities geared to new hams*.
- “Finding me more time” to be (more fully) involved is a frustration for more than four in ten members.

More take-away’s:

- Nearly half of all members belong only to FLARC.
- Fewer than one third claim to be now *currently active* in the club.
- *Getting more members involved is a key concern for many*. Recruiting younger members is also a concern for some members.
- *Keeping the club close together* is an ongoing need however it gets accomplished
- Digital/DMR has grown considerably in interest in the last year
- The SIG groups have appeared to gain traction and interest among those involved
- The loss of an “in-person” Field Day activity has impacted the club.

Want a copy of the presentations? The full presentation is available at www.fairlawnarc.org or send an email to wx2r@arrl.net

Monitoring SIG (continued)

antenna tuning and listening from the house or field. I love listening to foreign shortwave broadcasts: news, information and music.” “Listening to people from all over the world and searching for stations is enjoyable and rewarding as well, it’s also a fun way to just break from modern technology and be alone discovering things from number stations to music from another walk of life.”

I can learn something:

“Something different every day. The variability of reception. Learning more science, space weather, the ionosphere. Propagation is fascinating as well, looking forward to the new solar cycle.”

And... a little contemporary regret:

“I miss the old days. Occasionally I find something that makes me love it again.” I wish I had said that.

About half of the 30 contributors mentioned that they had become hams. Reading their contributions sort of indicated that they were older than those who had not gotten a license but that’s just speculation. There are not a lot of technical discussion and I sort of felt at home not being one myself.

So, for how much the radio world has changed, the appeal of the airwaves remains strong for many. Dave N2AAM and I are doing our best to drive this little SIG forward and we are hoping to attract some local SWLs and BCB DXers to join our group and maybe... just maybe, we can help them get their tickets. 00All this, and more, from the turn of a dial (remember those?)

DE Ed WX2R





NEW

SATELLITE SIG Special Interest Group

A NEW SIG HAS BEEN FORMED
for Space Radio Enthusiasts.

We welcome all who are interested in all types of space / satellite communications. Some interests are AMSAT, ARISS, receiving weather maps and SSTV from satellites, APRS via ISS, and much more. The moon is a satellite of earth, so moon bounce would also be included.

Some discussions will be:

- what radios and antennas can be used
- how to track the satellites
- how to make SatComm QSOs
- and much more.

I hope those with Satellite experience will join to Elmer those who are new to this aspect.

For those interested in joining all the Space Radio excitement – contact Bob H. at

KD2BKD@optonline.net

for information on the Satellite-SIG.

Or just go to the club website **FairLawnARC.org** and use the "Join Special Interest Group(s)" link on left.

FLARC Speaker Volunteers Make For Great 2021 Programs

Following up on the annual member survey, eight FLARC members have currently offered their time to do a 2021 **Kawfee Tawk** program. We will look to schedule these throughout the year to allow for preparation time and program balance.

Kawfee Tawk programs are tentatively fully booked through September. As a result, even if the Rec and Senior Centers reopen, we'll continue our programs exclusively on Zoom.

Thanks to all who have volunteered. If you're interested in presenting or know someone who would make a great speaker, let Ed WX2R know at wx2r@arrl.net



FLARC Wednesday Night Health and Welfare Umbrella Net

It's hard to believe we've been under COVID-19 restrictions for one year. March 13th will mark one full year since the FLARC Health and Welfare Net (H&W Net) has been on the air – at first every day and for the last few months every Wednesday. Please join us on Wednesday, March 10th for the special anniversary edition of the H&W Net.

We've all gone through hardships during the past year; many of us have lost loved ones, family members and friends and know of many who've been infected and recovered. Our Net brought us together through the toughest of times and kept us from being totally isolated.

We've provided useful information such as locations to purchase cleaning supplies, toilet paper, and senior shopping hours. In addition, we've brought radios to those without communication and brought food and other supplies to those who needed assistance. We've also discussed radio communications as well. We continue to serve our community; public service on the public air waves.

I'd like to personally thank everyone who has participated in the H&W Net over the past year and made it the success that it is.

David KD2MOB
H&W "Umbrella" Net Manager

What Is It? – Answer To Last Month's Question

By: Fred Belghaus W2AAB



Image: etsy

Yes, it's a vacuum tube, made in the 1980s. It's a high voltage diode rectifier delivering 30 kV at 70 Watts, made by Tesla. It is used to power tetrode pulse modulators in Roentgen LASERS. I'll bet there aren't many ham shacks with one of these in use!

73,

Fred W2AAB

All FLARC'ers Can Now Become Slackers

The club has recently introduced **Slack**, a communication platform developed by American software company Slack Technologies. Slack offers many cool features, including persistent chat rooms organized by topic, private groups, and direct messaging.

The introduction has come by suggestions from members to have greater interaction with each other during the Covid-19 lockdown. As of press time, 24 members have signed on and at times it is a gabfest bordering on an old-fashioned party line. It's also great for chatting during contests, such as the recent ARRL DX CW.

What Is It? – March, 2021

By: Fred Belghaus W2AAB



OK, all you hollow-state fans, what is it? You get no credit for saying “it’s some kind of vacuum tube.” Yes, of course it is, but *what* kind, and *how* was it used?

Answers next month.

73,

Fred W2AAB

Field Day 2020 — How Did FLARC Do?

As we all know, Field Day was not like times past. The Covid-19 adaptations (to be continued again in 2021) made the annual public service operating event a bit more difficult for those keeping score.

A compilation made by W3AO showed that our club finished 184th out of 1,761 – or the borderline of the top ten percent of all participants. Not bad for a non-contest club. The “2021 Field Day contest was won” by the W3AO Contest Team? Who else??

FLARC Monitoring SIG Gets A Mention In DX News

The club's Monitoring Special Interest Group got a nice mention in the February 23rd issue of DX News, the publication of the National Radio Club – a medium wave DX group. Thanks to David Yocis for getting us in. For more information on NRC, their email is amlog@nationalradioclub.org.

Edward Efchak – Fair Lawn NJ

With interest in all things HF growing, The Fair Lawn (NJ) Amateur Radio Club (FLARC) has recently created a special interest group for Radio Monitoring.

As the name would suggest, the group focuses heavily on broadcast band and shortwave DX'ing, but also includes low band, scanning, numbers, and almost anything else in the radio spectrum. Programs are also a regular part of the group and the club has recently featured Loren Libby W0LD, CEO of Trans World Radio, *DX News* frequent contributor Paul Walker discussing BCB monitoring from Alaska, and Dave Marthouse N2AAM providing an up-to-date tour of the contemporary radio spectrum. Prior to Covid-19, the group was also active in visiting local New York radio stations with plans to continue once the pandemic has passed.

The group now consists of 23 members, many of whom also belong to NRC with both long and recent interest in our hobby. FLARC's SIG group is especially seeking DX'ers from the metro New York area, but geography is not a restriction. You need not be a radio amateur to join the SIG, and the club does help anyone interested in getting licensed assistance in getting their ticket.

For more information, email me (I'm the club's Public Information Officer) - at fairlawnarc@gmail.com or wx2r@arrl.net. The club's website is www.fairlawnarc.org.

International DX Digest

Bruce Conti, 46 Ridgefield Drive, Nashua NH 03062-1174

contiba@gmail.com

For loggings of stations outside the U.S. and Canada

All times are Universal Coordinated Time (UTC)

2020 Frank Leonard W2NPT Memorial Award

After being announced on our February Business Meeting, Thom Guida, W2NZ was awarded the **2020 Frank Leonard W2NPT Memorial Award** for his contributions to FLARC. Thom has demonstrated his unconditional support to our Club — offering his time and resources to ensure that through his video production work, the happenings of our Club are documented for posterity and serve as a vehicle to make us known everywhere by everyone. Our sincere gratitude to Thom for all that he does for us.



In the picture (l to r): John L. Howard, W2JLH - Nomar Vizcarrondo, NP4H - Thom Guida, W2NZ - Bruce Kalogera, NJ2BK



FLARC PortableOps SIG

PortableOps@FairLawnARC.groups.io

This is a Special Interest Group (SIG) for members interested in portable ham radio operation such as POTA, SOTA, IOTA, LOTA, etc.

The purpose of this SIG is to get outdoors and practice our operating skills from different places. We can share outing experiences, tips and work on our operating skills.

Hi all. Just want to say thank you to all that showed up Sunday, Feb. 28th at the park (Tallman Mountain State Park, FN31AB, K-2149) for our first POTA activation as a group: Vlad KD2PJL, Nomar NP4H, Steve WI2W, Jim W2KNG, Bob KD2BKD and Bruce W2SE.

Thanks to John W2JLH and Bruce W2SE for hunting us from home. The weather held up until about 1pm, when it began to rain with a little ice mix.

We all showed up around 9am and were able to activate three stations at K-2149. Several contacts were made on 40M, 20M, 17M, 2M and 70cm phone, for a total of about 50 contacts.

I setup my 20M ham stick on the Jeep with my go box - which had my Icom 706mkiig.

Nomar NP4H operated his Yaesu FT-817 at 2.5 watts with my ham stick antenna. Steve WI2W had his Kenwood TS-480 and multiband mobile antenna and his 20' multiband vertical antenna on a tripod.

Vlad KD2PJL had his Yaesu FT-991 and ham stick dipole antenna. Bob KD2BKD showed up with his all band all mode Rover setup.

I hope everyone had a good time and walked away learning a thing or two from this activation. It was great seeing everybody in person after months of ZOOM meetings and NETS.

I think most questions were answered for those learning the ropes about operating portable and hopefully this will motivate other hams to operate portable in the future and for those that couldn't make it - have no worries, we will do it again soon.

de Noel, W2MSA

Report from Portable Ops SIG, cont'd



Nomar NP4H checking out Noel's "go box"



Noel W2MSA operating his "go box"



Vlad KD2PJL adjusts POTA portable antenna

Fair Lawn RACES/ARES Corner, cont.

operate within Bergen County and from time to time has training opportunities with Bergen County RACES.

We will be the Net Control Operating Station for the BC-RACES Net on May 26, 2021 at 7:45 PM and are looking for a Net Control Operator and scribe for the BC-RACES Net. Thank you to those who have taken part as the Net Control Station in the past.

During the COVID-19 pandemic, our monthly briefings take place during the FLARC business meeting. Please join us for the next FL-RACES briefing. The volunteer efforts of our members are very much appreciated. If you are interested in joining the Fair Lawn RACES, please contact me. Anyone who's a licensed amateur radio operator may join Fair Lawn RACES and there's no residential requirement.

For information regarding Bergen County RACES, please go to <http://www.bcnjraces.org>

Please be safe and be well. Thank you very much.

73.

David KD2MOB,
Emergency Coordinator FL-ARES and
President FL-RACES



From The President, continued.

hunters, thanks. To Noel, W2MSA our appreciation in sparking the interest to us and becoming our POTA Elmer. We look forward in activating other parks here in the area, and perhaps... BEYOND...

This month, we'll have an extra cup of kawfee... Two very interesting Kawfee Tawks have been scheduled for March, so check this edition of The Resonator for the details.

Don't forget to join us in our nets, virtual gatherings, and take advantage of all the good things FLARC has to offer to you. I promise, you will have a good time...

Take care, stay safe and healthy and I'll "see ya' on the radio"...

73,

Nomar, NP4H

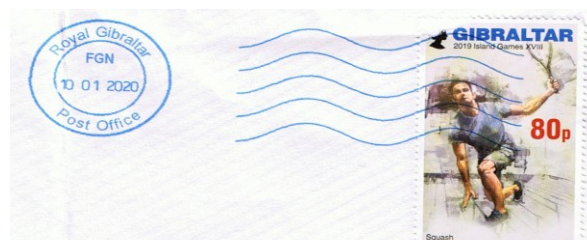
FLARC President



HAPPY AND SUCCESSFULL 2020
TO YOU ALL AT FAIR LAWN
ARC, AND MAY THE PROP BE
WITH US!

TO RADIO: W2NPT			CONF. OUR QSO	
MODE	FREQ.	R S T	DATE	TIME
SSB	40m	559	18/4/19	2258
CW	20m	599	7/6/19	2240
FM				

PS: TNX QSL GOOD LUCK 73 S GOOD DX IF/WHIF
TO ALL AND GLAD TO HELP.



Theoretics Demystified

The following is general advice for those with older homes and a knowledge of electricity and experience with the proper tools for the job.

If you have a new house all of your wiring is up to code? Right? Well you hope so. If you have an older house then probably not, and if the previous owner did some electrical work then most likely not.

The other thing is that existing wiring generally does not have to be updated unless there has been renovation work. That said, you can check and upgrade a lot yourself. The most important thing is SAFETY!!!

As far as safety goes, a common problem is that the hot and neutral are reversed at an outlet. You can get an outlet tester and that will tell you if the outlet is wired properly. The larger blade opening is for the neutral. The smaller blade opening is for the hot leg and the rounded opening is for the ground. The two blades of a plug are of even length with the neutral being wider, or with a wider end on a two prong 'polarized' plug – and the same on a three prong plug, with the ground pin longer than the flat blades. This is to insure that the device is safety grounded before the hot connects.

If you find an outlet where the plugs are easily inserted or loose, then replace it! This is because a loose connection means a poor connection and that means resistance and that means possible heating and cause for a fire... or at least heating of the plug and outlet.

As with all electromechanical connections, inserting or removing a plug causes mechanical abrasion which has the effect of cleaning the contact areas.

If you find that upon removing an outlet for inspection, or rewiring to correct a connection reversal, that it used the push in type of wiring, rewire it using the screw terminals.

If it feeds another outlet 'downstream' then you should wire together the feed wires in and out and use a pigtail to connect to the outlet. If that is not possible due to wiring constraints, then at least use the screw terminals instead of the push in

Theoretics Demystified, continued

circuit connectors. Keep in mind that this is just a guide to help in checking and upgrading connections and installations of the electrical outlets in your home.

A very useful and necessary tool is a contactless voltage tracer. Never assume that just because you turned off a breaker labeled for the circuit that you are working on that it is really off. The one I use is called the 'ultimate AC sensor' made by Santronics and is made in the USA! You can find it at Wayne Electronics in Pompton Plains. It has the advantage of using two AAA batteries, which give it a long life and a good shelf life – especially if you install lithium batteries.

When working on house wiring never wear any jewelry, and use the proper PPE! If your house is older it is a good, although time consuming, idea to map out all circuits and label your panel - along with a written description and a floor plan showing all outlets and light fixtures and their associated breakers by number.

You can also label all outlets with a small label. In a newer house all of the labeling might be already done at the panel, but it never hurts to check. In an old house it is almost a necessity.

In an older house it is prudent to also check and tighten connections in junction boxes. A word about armored or 'BX' cable which has been installed decades ago. When dealing with old BX cable, the wire was most often cotton covered rubber insulation.

Over time that insulation becomes brittle and will disintegrate upon being handled. Then you must re-insulate it using fiberglass or silicone or some type of approved spaghetti tubing. The tubing must go back up to where the insulation is viable and that area needs to be taped over with linerless rubber insulating tape. (That keeps the oxygen from breaking down the good insulation). Regular electrical is not airtight and does not stretch to conform to the wires and armored cable.

Continued on page 48.

Fair Lawn Amateur Radio Club to Help Celebrate *World Amateur Radio Day* on April 18th — Highlighting the Value of Communication Amid Isolation

On the day that commemorates the anniversary of the founding of the International Amateur Radio Union (IARU) in Paris in 1925, the Fair Lawn (NJ) Amateur Radio Club (FLARC) will help celebrate the April 18th event with members operating a series of stations from their homes – to demonstrate amateur radio and its value by communicating with fellow "hams" around the world.

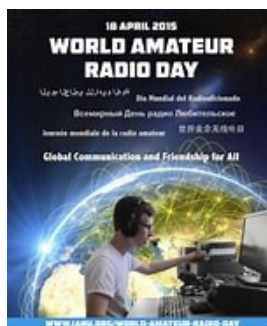
This year's theme is *"Amateur Radio: Home but Never Alone."* As the Covid-19 pandemic continues to force global isolation, the amateur radio community has responded positively with activities such as "Wellness Nets" (to keep amateurs in touch and check on those who may be higher risk or elderly), special "Stay Safe" special event stations across the globe, and generally higher levels of amateur activity.

Club members are asked to "get on the air" using their call sign but mentioning World Amateur Radio Day (WARD) and FLARC in their QSOs.

If we get a number of volunteers, we can set up a schedule to make sure the club is operating the entire 24 hours of WARD. While any mode is acceptable, we might suggest using voice to help "talk up" WARD.

This is the third year that FLARC will be participating in the event, which is run by the IARU with stations operating around the world.

We'll provide more details on the event as April 18th gets closer.



Theoretics Demystified, continued

The rubber tape needs to cover the good wiring and go up and over the armoring of the BX cable for airtightness and abrasion resistance. The key here is making things safe or safer.

Lastly, it is good to tighten all screw connections in your electrical panel. Do this with the mains OFF!!

The reason for checking and tightening any electrical screw connections is that with heat and cold, and the resultant expansion and contraction of metals, terminal connections can loosen up a bit.

All of this comes down to keeping the resistance of connections in the house electrical system to the absolute minimum; that also contributes to the safety of the home.

Another thing is that if there are any existing outlets within six feet of a sink, then you should change the outlets to the GFI or Ground Fault Interrupter type. GFI outlets protect you in case of accidental contact with water or dampness and a live wire or defective hair dryer for example.

The newest required GFI are of the "arc flash" type, which protect in case of arcing due to a short.

What this all leads to is safety and especially safety in the ham shack! Keep wiring neat, clean and orderly and up to date. Document circuits and anything special. Check connections periodically and keep things uncluttered so that you can spot potential problems. Above all be safe.

Remember that the 120 volts is really more than 300 volts peak to peak! Most of this is old hat to the experienced ham but a refresher never hurts.

73,

Fred Wawra, W2ABE



What is a GFI Outlet?

Short for Ground Fault Circuit Interrupter, a GFI (also known as GFCI) is a type of electrical outlet designed to protect you and your family against electrical shock, fire, and/or fatal electrocution. Your GFCI outlet (receptacle) monitors the flow of current. If it detects a ground fault -- an unintentional electrical path to the ground -- it will immediately cut the power, to protect anyone in physical contact with the electrical system.

In A Nutshell

Winter Field Day is behind us and we are ALL looking forward to spring, after many feet of snow which is still around us in the higher elevations!

Time to think about that antenna work and maintaining that always needs to be done. Hopefully we all can get back to a normal life soon and spend time together.

Meanwhile until then get on the air or DX the AM broadcast band for fun. Perhaps even build a radio for ham band listening (can be very simple) or even a crystal set for short wave or broadcast listening.

There are also nets on the 75 meter part of the 80 meter band and of course on the 2 meter Fair Lawn repeater with the 'Near and Far net' on Monday nights.

Become a club member and for less than the cost of a pizza you can become involved in the Club and support Amateur Radio through various club activities!

Just think, Ham Radio opens up a whole new world of friends and activities, not to mention the 'keep you young' learning that goes along with it.

You can sail the ship of amateur radio all around the world and make many new friends along the way!

73!

Fred Wawra, W2ABE



Super Science Saturday • Ridgewood, NJ

Every year, the Ridgewood High School and other supporting groups create a STEM-based Science Fair and Show. Typically, this occurs in-person at the Ridgewood High School — but, of course, this year that could not happen... so, like so many other events, they did it "on line."

FLARC was honored to be asked to provide a short "infomercial" about Ham Radio and about FLARC. Our "professional quality" videographer, Thom W2NZ, took the last-minute challenge and ran with it — crossing the finish line with a very nice result.

Thom spent many, many hours of his life the last few weeks developing and tweaking this video, so it is something we can be really proud to have on public display. And of course, FLARC thanks the SuperScienceSaturday.org team for inviting us to participate this way.



You can visit their website at:

<http://supersciencesaturday.org/index.php>

Scroll down until you find our entry --



and you can watch our nifty little video.



March 2021 FLARC Business Meeting

Fairlawn Amateur Radio Club
Secretary's Minutes *prepared by* Tom McCabe
N2AXX

Business Meeting of March-5-2021

The meeting was called to order by President, Nomar Vizcarrondo, NP4H via Zoom video teleconference at 7:30 pm and concluded at approximately 8:42 pm.

Pledge of Allegiance was recited at 7:31 pm

Tom N2AXX facilitated a roll call and a quorum was established:

President: Nomar Vizcarrondo, NP4H

Vice President: John Howard, W2JLH

Treasurer: Bruce Kalogera, NJ2BK

Secretary: Tom McCabe, N2AXX

Trustees (3): Don Cassarini, K2PD
Ed Efchak, WX2R
Fred Wawra, W2ABE

Note: 35 participants attended this Zoom video teleconference

February 2021 FLARC Meeting Minutes were published in the February 2021 edition of The Resonator. A motion to accept the minutes was presented and was accepted by John W2JLH, and seconded by Charlie AC2ZU.

The treasurer's report was presented by Bruce, NJ2BK, and the motion to accept the financial report was presented and accepted by Skip KD2BRV and seconded by Judith KC2LTM, and accepted by the membership.

Reminder... please remit your **2021 FLARC Membership Dues** to our Treasurer:

Bruce F Kalogera NJ2BK
163 Meadow Lane
Secaucus, NJ 07094

Visitors: None

March 2021 FLARC Business Meeting, continued

Committee Reports

Technical Report: None

Publicity & Talks:

- World Amateur Radio Day is April 18th. This is an operating event, not a contest. FLARC volunteers might be on the air that day with a POTA operation?
 - <https://www.iaru.org/on-the-air/world-amateur-radio-day/>
- The planned Fair Lawn Street Fair dates for 2021 are June 13 and October 17
- Pop Up Tuesdays via ZOOM have restarted as of March 9

Kawfee Tawks:

- March 12: Dave Snyder KD2VGT : Seton Hall Prep, STEM projects utilizing Amateur Radio / APRS tethered to balloons
- March 19: Otis Vincens NP4G: INDEXA foundation... DX'ing and DX'peditions
- April 16: Wayne Smith WB2ONZ: "A Contemporary View of The Civil Air Patrol"
- May 21: Roland C Luetzelschwab K9LA: Radio Propagation
- June 11: Barry Feiurman K3EUI: Sound Card Digital Modes
- July 16: Skip Arey N2EI Tentative: Antennas Made Simple
- FLARC MEMBER SPEAKERS: 2 in Q2, 2 in Q3 2 in Q4. Speakers / Topics TBD.

The Resonator... we will attempt to continue to publish on a monthly basis over 2021.

Continued on next page.

March 2021 FLARC Business Meeting, continued

Website:

Jim W2JC reports that our website, *Kawfee Tawk* announcements, Groups.io and file sharing are posted, active, and working well. VE Testing dates are also posted. Our main Groups.io is up to 140 participants.

Social Media:

Thom W2NZ reports that within the last four weeks there are 6 new FLARC YouTube Channel subscribers and 1,300 views with over 200 hours of viewing time. FLARC submitted video content for Ridgewood High School's STEM Fair / Super Science Saturday to be held Saturday, March 6.

RACES/ARES:

Dave KD2MOB reports Fair Lawn RACES members need to complete their training. The newly consolidated Bergen County RACES / Fair Lawn ARES / Passaic County ARES Net on Wednesday evenings has started. The official name for the joint operation is *Northeast New Jersey ARES Network*. Red Cross & ARES will conduct a joint drill on May 8th. WinLink technology will be used for messaging.

Field Day:

John W2JLH is monitoring Covid-19 / social conditions and thinks within the next 30 days it might be possible for conditional access to Memorial Park for a June-2021 Field Day Operation. The back-up plan is 2020 operating conditions from your home shack. As of February 2021, ARRL's position and notes are covered: <http://www.arrl.org/news/arrl-to-extend-field-day-rule-waivers-from-2020-add-class-d-and-e-power-limit>

VE Sessions:

Gene, WO2W says **VEs are needed!** Indoor testing is on and tends to fill up fast! Special thanks to Nomar NP4H for enabling access to the new testing location at 99 South Maple Avenue, Ridgewood, NJ 07450. Watch the FLARC calendar

March 2021 FLARC Business Meeting, continued

for dates and times and contact Gene WO2W with any questions. Moving to (2) monthly test sessions is possible with the right number of VE Examiners. The March 13 session is full and the overflow moved into the April 2021 session with 6 *test takers* / potential hams.

Old Business

Thom Guida W2NZ was presented with the 2020 3rd Annual Frank Leonard W2NPT Memorial Award by President Nomar NP4H the week of March 1st. Tom proudly showed off the combined plaque and clock. Congratulations Thom... a job well done!

FLARC Hamfest:

Gene WO2W reports the Borough of Fairlawn will provide portable toilets for the Hamfest in place of financial support. Hamfest will be in the DPW Recycling Center parking area located along Saddle River Road. The Ham-Fest was tentatively scheduled for Saturday, April 24th, 2021 and needs to be postponed due to Covid-19 / social conditions. Stay tuned!

Special Interest Groups (SIGs):

Monitoring: No report

DMR:

Bob, KD2BKD – highlighted the traffic of the FLARC DMR Net, Tuesdays at 7 pm. DMR Talk Group **TG310015** may be accessed via DMR radios and a Hot-Spot, or the new DudeStar (Windows) or DroidStar (Android) apps. An official BrandMeister Talk Group for FLARC is pending per Nomar NP4H and TG 31347 has been requested from BrandMeister!

<https://brandmeister.network/>

Support with DMR radios and "Hot Spotting" and the newer Apps are available.

Contact Bob KD2BKD.

Continued on next page.

March 2021 FLARC Business Meeting, continued

POTA:

Noel W2MSA reports a great turn-out for the FLARC POTA at Tallman Park on Sunday, Feb-28. A video montage was prepared and played by Noel as a special thank you to all of the attendees for turning out on a rainy weekend to get on the air, learn, and have fun. Several FLARC members acted as POTA Hunters and spotted the operation. A special DMR versus analog FM experiment is being planned to demonstrate the benefits of digital modes and signal-to-noise benefits of DMR. Steve KA2YRA was presented with FLARC's new **Purple Heart Award** for persevering with a POTA operation in spite of a nasty fall and injury.

DX: No report

FT8: No report

Satellites:

a *NEW Groups.io SIG...* the group is up and active with postings and interest building. A few comments were made pertaining to the ISS being down with an antenna issue and that troubleshooting was underway.

New Business

Health & Welfare:

Reminder to all... Stay safe and healthy!

New licensee packets are being assembled by Van W2DLT to hand out at VE Sessions, to enable the new hams to get a jump start to get on the air!

Pop Up Tuesdays via ZOOM have restarted as of March 9

New Member Support:

Berlotte KD2MYF requested DMR help... DroidStar would not load to her SmartPhone, possibly due to a lack of memory. She would like to try DudeStar.

Motion to Close and Adjourn:

Proposed by John W2JLH and seconded by Judy KC2TLM at 8:42 pm.

Respectfully submitted March 6, 2021

Tom McCabe N2AXX

REMINDER

**Membership
Dues**



Reminder... please remit your
2021 FLARC Membership Dues [\$25 / year]
to our Treasurer:

Bruce F Kalogera NJ2BK
163 Meadow Lane
Secaucus, NJ 07094

**Leap into
Amateur Radio**

**with the
Fair Lawn
Amateur Radio Club**

www.FairLawnARC.org

